



REDACTED VERSION

December 28, 2015

Service Request No: E1500973

Jacquelyn Young  
San Jacinto River Coalition  
3262 Westheimer Road #142  
Houston, TX 77098

**Laboratory Results for: San Jacinto River Coalition/ SJRC (b) (6)**

Dear Jacquelyn,

Enclosed is the amended report for samples submitted to our laboratory on September 25, 2015. For your reference, these analyses have been assigned our service request number E1500973.

This amended report was revised to include the PCB results and full service report. Please replace Final\_E1500973ak with the report enclosed.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current TNI standards, where applicable, and considered in their entirety, and ALS Environmental is not responsible for use of less than the final complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report. In accordance to the TNI 2009 Standard, a statement on the estimated uncertainty of measurement of any quantitative analysis will be supplied upon request.

Please contact me if you have any questions. My direct number is 281-575-2279.

Respectfully submitted,

Arthi Kodur  
Project Manager

**ALS Environmental**

For a specific list of NELAP-accredited analytes, refer to the certifications section at [www.alsglobal.com](http://www.alsglobal.com).

ADDRESS 10450 Stancliff Road, Suite 210, Houston Texas 77099 USA | PHONE +1 713 266 1599  
ALS GROUP USA, CORP. Part of the ALS Group An ALS Limited Company

Environmental

[www.alsglobal.com](http://www.alsglobal.com)

RIGHT SOLUTIONS RIGHT PARTNER



October 23, 2015

Service Request No:E1500973

Jacquelyn Young  
San Jacinto River Coalition  
3262 Westheimer Road #142  
Houston, TX 77098

### Laboratory Results for: San Jacinto River Coalition

Dear Jacquelyn,

Enclosed are the results of the sample(s) submitted to our laboratory September 29, 2015  
For your reference, these analyses have been assigned our service request number **E1500973**.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current TNI standards, where applicable, and except as noted in the laboratory case narrative provided. All results are intended to be considered in their entirety, and ALS Environmental is not responsible for use of less than the final complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report. In accordance to the TNI 2009 Standard, a statement on the estimated uncertainty of measurement of any quantitative analysis will be supplied upon request.

Please contact me if you have any questions. My extension is 2279. You may also contact me via email at Arthi.Kodur@alsglobal.com.

Respectfully submitted,

**ALS Group USA, Corp. dba ALS Environmental**

A handwritten signature in black ink, appearing to read "Arthi Kodur".

Arthi Kodur  
Project Manager

ADDRESS 10450 Stancliff Rd., Suite 210, Houston, TX 77099

PHONE +1 713 266 1599 | FAX +1 713 266 0130

ALS Group USA, Corp.

dba ALS Environmental



# Certificate of Analysis

**ALS Environmental - Houston HRMS**  
10450 Stancliff Rd, Suite 210, Houston TX 77099  
Phone (713)266-1599 Fax (713)266-0130  
[www.alsglobal.com](http://www.alsglobal.com)

RIGHT SOLUTIONS | RIGHT PARTNER

## ALS ENVIRONMENTAL

**Client:** San Jacinto River Coalition  
**Project:** San Jacinto River Coalition/ SJRC (b) (6)  
**Sample Matrix:** Water      **Service Request No.:** E1500973  
**Date Received:** 9/25/15-9/29/15

### ALS ENVIRONMENTAL NARRATIVE

All analyses were performed in adherence to the quality assurance program of ALS Environmental. This report contains analytical results for samples designated for Tier IV. When appropriate to the method, method blank results have been reported with each analytical test.

#### Sample Receipt

Two water samples were received for analysis at ALS Environmental – Houston HRMS on 9/25/15-9/29/15.

The samples were received between -1.8 to 0.4°C in good condition and are consistent with the accompanying chain of custody form. The samples were stored in a refrigerator at 4°C upon receipt at the laboratory.

The PCB fraction was sent to ALS Burlington for analysis by 1668A on 10/7/15 but required re-extraction. Additional sample was submitted to ALS Houston on 12/2/15. The results from the re-extraction are included in this report.

Samples were submitted to ALS Houston Full Service for 8270, 8260, and 6020. The results are included in the report as well.

#### Data Validation Notes and Discussion

#### Method Blank

The Method Blank EQ1500602-01 contained low levels of OCDD above the EDL, but below the Method Reporting Limit (MRL).

The associated compounds in the samples, regardless of concentration, are flagged with 'B' flags, which may be > or equal to 10 times the concentration in the MB.

#### MS/MSD

EQ1500602: Laboratory Control Spike/Duplicate Laboratory Control Spike (LCS/DLCS) samples were analyzed and reported in lieu of an MS/DMS for this extraction batch. The batch quality control criteria were met.

#### 2378-TCDF

Samples analyzed on the DB-5MSUI column were analyzed under conditions were sufficient separation between 2,3,7,8-TCDF and its closest eluter was achieved. Confirmation of this result was not required.

### **K flags**

EMPC - When the ion abundance ratios associated with a particular compound are outside the QC limits, samples are flagged with a 'K' flag. A 'K' flag indicates an estimated maximum possible concentration for the associated compound.

### **Detection Limits**

Detection limits are calculated for each analyte in each sample by measuring the height of the noise level for each quantitation ion for the associated labeled standard. The concentration equivalent to 2.5 times the height of the noise is then calculated using the appropriate response factor and the weight of the sample. The calculated concentration equals the detection limit.

### **Manual Integrations**

For this type of instrumentation and software, manual integration may be required frequently to correct inaccurate integrations performed by the processing software. These manual integrations are indicated in the raw data with a before and after chromatogram and are stamped with the reason for integration.

### **The TEF Summary results for each sample have been calculated by ALS ENVIRONMENTAL/Houston to include:**

- WHO-2005 TEFs, The 2005 World Health Organization Reevaluation of Human and Mammalian Toxic Equivalency Factors for Dioxins and Dioxin-Like Compounds (M. Van den Berg et al., Toxicological Sciences 93(2):223-241, 2006)
- WHO-1998 TEFs, for PCBs, PCDDs, 21 PCDFs for humans and wildlife. (M. Van den Berg, et al., Environ Health Perspect 106: 775-792, 1998)
- Non-detected compounds are not included in the 'Total'

*The results of analyses are given in the attached laboratory report. All results are intended to be considered in their entirety, and ALS Environmental (ALS) is not responsible for utilization of less than the complete report.*

*Use of ALS group USA Corp dba ALS Environmental (ALS)'s Name. Client shall not use ALS's name or trademark in any marketing or reporting materials, press releases or in any other manner ("Materials") whatsoever and shall not attribute to ALS any test result, tolerance or specification derived from ALS's data ("Attribution") without ALS's prior written consent, which may be withheld by ALS for any reason in its sole discretion. To request ALS's consent, Client shall provide copies of the proposed Materials or Attribution and describe in writing Client's proposed use of such Materials or Attribution. If ALS has not provided written approval of the Materials or Attribution within ten (10) days of receipt from Client, Client's request to use ALS's name or trademark in any Materials or Attribution shall be deemed denied. ALS may, in its discretion, reasonably charge Client for its time in reviewing Materials or Attribution requests. Client acknowledges and agrees that the unauthorized use of ALS's name or trademark may cause ALS to incur irreparable harm for which the recovery of money damages will be inadequate. Accordingly, Client acknowledges and agrees that a violation shall justify preliminary injunctive relief. For questions contact the laboratory.*

**Client:** San Jacinto River Coalition  
**Project:** San Jacinto River Coalition/SJRC (b) (6)

**Service Request:** E1500973

**SAMPLE CROSS-REFERENCE**

<u>SAMPLE #</u>	<u>CLIENT SAMPLE ID</u>	<u>DATE</u>	<u>TIME</u>
E1500973-001	1H	9/29/2015	1310
E1500973-002	2H	9/29/2015	1310
E1500973-003	SJRC (b) (6) #3H	9/29/2015	1300
E1500973-004	SJRC (b) (6) #4H	9/29/2015	1300
E1500973-005	SJRC (b) (6) #5H	9/29/2015	1300

## Service Request Summary

**Folder #:** E1500973  
**Client Name:** San Jacinto River Coalition  
**Project Name:** San Jacinto River Coalition  
**Project Number:** SJRC (b) (6)

**Report To:** Jacquelyn Young  
 San Jacinto River Coalition  
 3262 Westheimer Road #142  
 Houston, TX 77098  
 USA  
**Phone Number:** 281-414-3194  
**Cell Number:**  
**Fax Number:**  
**E-mail:** jeyoung@texanstogether.org

**Project Chemist:** Arthi Kodur  
**Originating Lab:** HOUSTON  
**Logged By:** ALOPEZ  
**Date Received:** 09/29/15  
**Internal Due Date:** 11/4/2015  
**QAP:** LAB QAP  
**Qualifier Set:** Lab Standard  
**Formset:** Lab Standard  
**Merged?:** N  
**Report to MDL?:** Y  
**P.O. Number:**  
**EDD:** No EDD Specified

3 40 mL-Glass Vial VOA AMBER Tef/Silicone Septa HCL  
 4 1000 ml-Glass Bottle NM AMBER Teflon Liner Unpreserved  
 1 250 mL-Glass Bottle NM AMBER Teflon Liner HCL  
**Location:** SMO, SUBBED, E-Disposed  
**Pressure Gas:**

		HOUSTON		Houston Full Service
		Cl Biphen Cong/1668C	Dioxins Furans/1613B	Misc Out 1/None
E1500973-001	1H	Water	09/29/15 1310	IV
E1500973-002	2H	Water	09/29/15 1310	IV
E1500973-003	SJRC (b) (6) #3H	Water	09/29/15 1300	IV
E1500973-004	SJRC (b) (6) #4H	Water	09/29/15 1300	IV
E1500973-005	SJRC (b) (6) #5H	Water	09/29/15 1300	IV

Lab Samp No.	Client Samp No	Matrix	Collected
E1500973-001	1H	Water	09/29/15 1310
E1500973-002	2H	Water	09/29/15 1310
E1500973-003	SJRC (b) (6) #3H	Water	09/29/15 1300
E1500973-004	SJRC (b) (6) #4H	Water	09/29/15 1300
E1500973-005	SJRC (b) (6) #5H	Water	09/29/15 1300

## Service Request Summary

**Folder #:** E1500973  
**Client Name:** San Jacinto River Coalition  
**Project Name:** San Jacinto River Coalition  
**Project Number:** SJRC (b) (6)

**Report To:** Jacquelyn Young  
San Jacinto River Coalition  
3262 Westheimer Road #142  
Houston, TX 77098  
USA  
**Phone Number:** 281-414-3194  
**Cell Number:**  
**Fax Number:**  
**E-mail:** jeyoung@texanstogether.org

**Project Chemist:** Arthi Kodur  
**Originating Lab:** HOUSTON  
**Logged By:** ALOPEZ  
**Date Received:** 09/29/15  
**Internal Due Date:** 11/4/2015  
**QAP:** LAB QAP  
**Qualifier Set:** Lab Standard  
**Formset:** Lab Standard  
**Merged?:** N  
**Report to MDL?:** Y  
**P.O. Number:**  
**EDD:** No EDD Specified

3 40 mL-Glass Vial VOA AMBER Tef/Silicone Septa HCL  
4 1000 ml-Glass Bottle NM AMBER Teflon Liner Unpreserved  
1 250 mL-Glass Bottle NM AMBER Teflon Liner HCL  
**Location:** SMO, SUBBED, E-Disposed  
**Pressure Gas:**

### **Test Comments:**

<b>Group</b>	<b>Test/Method</b>	<b>Samples</b>	<b>Comments</b>
Semivoa GCMS	Cl Biphen Cong/1668C	1	sub to Burlington (ak 9/30/15)
Semivoa GCMS	Dioxins Furans/1613B	1	full list(ak 9/30/15)

# Superset Summary

Service Request: E1500973

SuperSet Reference: 15-0000351500 rev 00

Analytical Method: 1613B

Calibrations: 08/19/15

**Data Files:**

Raw Data	Begin CCAL	Method Blank	Lab ID
P600919	P600911	P600942	E1500973-001
P600942	P600939	P600942	EQ1500602-01
P600966	P600954	P600942	EQ1500602-02
P600967	P600954	P600942	EQ1500602-03

## **Data Qualifiers**

### **HRMS Qualifier Set**

- B Indicates the associated analyte was found in the method blank at >1/10th the reported value.
- E Estimated value. The reported concentration is above the calibration range of the instrument.
- H Sample extracted and/or analyzed out of suggested holding time.
- J Estimated value. The reported concentration is below the MRL.
- K The ion abundance ratio between the primary and secondary ions were outside of theoretical acceptance limits. Reported concentration is a conservative estimate, however EMPC correction was not applied.
- P Chlorodiphenyl ether interference was present at the retention time of the target analyte. Reported result should be considered an estimate.
- Q Monitored lock-mass indicates matrix-interference. Reported result is estimated.
- S Signal saturated detector. Result reported from dilution.
- U Compound was analyzed for, but was not detected (ND).
- X See Case Narrative.
- Y Isotopically Labeled Standard recovery outside of acceptance limits. In all cases, the signal-to-nois ratios are greater than 10:1, making the recoveries acceptable.
- i The MDL/MRL have been elevated due to a matrix interference.

# ALS Laboratory Group

---

## Acronyms

Cal	Calibration
Conc	CONCentratiOn
Dioxin(s)	Polychlorinated dibenzo-p-dioxin(s)
EDL	Estimated Detection Limit
EMPC	Estimated Maximum Possible Concentration
Flags	Data qualifiers
Furan(s)	Polychlorinated dibenzofuran(s)
g	Grams
ICAL	Initial CALibration
ID	IDentifier
Ions	Masses monitored for the analyte during data acquisition
L	Liter (s)
LCS	Laboratory Control Sample
DLCS	Duplicate Laboratory Control Sample
MB	Method Blank
MCL	Method Calibration Limit
MDL	Method Detection Limit
mL	Milliliters
MS	Matrix Spiked sample
DMS	Duplicate Matrix Spiked sample
NO	Number of peaks meeting all identification criteria
PCDD(s)	Polychlorinated dibenzo-p-dioxin(s)
PCDF(s)	Polychlorinated dibenzofuran(s)
ppb	Parts per billion
ppm	Parts per million
ppq	Parts per quadrillion
ppt	Parts per trillion
QA	Quality Assurance
QC	Quality Control
Ratio	Ratio of areas from monitored ions for an analyte
% Rec.	Percent recovery
RPD	Relative Percent Difference
RRF	Relative Response Factor
RT	Retention Time
SDG	Sample Delivery Group
S/N	Signal-to-noise ratio
TEF	Toxicity Equivalence Factor
TEQ	Toxicity Equivalence Quotient



## State Certifications, Accreditations, and Licenses

<b>Agency</b>	<b>Number</b>	<b>Expire Date</b>
American Association for Laboratory Accreditation	2897.01	11/30/2015
Arizona Department of Health Services	AZ0793	5/27/2016
Arkansas Department of Environmental Quality	14-038-0	6/16/2016
California Department of Health Services	2452	2/28/2017
Florida Department of Health	E87611	6/30/2016
Kansas Department of Health and Environment	E-10406	1/31/2016
Louisiana Department of Environmental Quality	03048	6/30/2016
Louisiana Department of Health and Hospitals	LA150026	12/31/2015
Maine Center for Disease Control and Prevention	2014019	6/5/2016
Maryland Department of the Environment	343	6/30/2016
Michigan Depratment of Environmental Quality	9971	6/30/2016
Minnesota Department of Health	840911	12/31/2015
Nebraska Department of Health and Human Services	NE-OS-25-13	6/30/2016
New Mexico Environment Department	TX02694	6/30/2016
New York Department of Health	11707	4/1/2016
Oregon Environmental Laboratory Accreditation Program	TX200002	3/24/2016
Pennsylvania Department of Environmental Protection	68-03441	6/30/2016
Texas Commision on Environmental Quality	TX104704216-14-5	6/30/2016
United States Department of Agriculture	P330-14-00067	2/21/2017
Washington Department of Health	c819	11/14/2015
West Virginia Department of Environmental Protection	347	6/30/2016

ALS ENVIRONMENTAL – Houston  
Data Processing/Form Production and Peer Review Signatures

SR# Unique ID **E 1500973**

DB-5MSU

SPB-Octyl

**First Level - Data Processing** - to be filled by person generating the forms

Date:	Analyst:	Samples:
-------	----------	----------

10/22/15	JL	-001
----------	----	------

**Second Level - Data Review** – to be filled by person doing peer review

Date:	Analyst:	Samples:
-------	----------	----------

10/22/15	LKL	001
----------	-----	-----



## Chain of Custody

**ALS Environmental - Houston HRMS**  
10450 Stancliff Rd, Suite 210, Houston TX 77099  
Phone (713)266-1599 Fax (713)266-0130  
[www.alsglobal.com](http://www.alsglobal.com)

RIGHT SOLUTIONS | RIGHT PARTNER



**CHAIN OF CUSTODY - HRGC/HRMS - LABORATORY ANALYSIS REPORT FORM**

10450 Stancliff Road, Suite 210, Houston, TX 77099 | 713.266.1599 | alsusa.hrms@alsglobal.com | www.alsglobal.com

DATE \_\_\_\_\_ PAGE \_\_\_\_\_ OF \_\_\_\_\_

Project Name: SJRC (b) (6)				Analysis Request														
Project #: _____																		
Company/Address: 3262 Westheimer Rd. #102 Houston, Texas 77098																		
Phone: 281-414-3194																		
Report to: Jacquelyn Young																		
SAMPLE I.D.	DATE	TIME	SAMPLE MATRIX	Number of Containers	REMARKS / SAMPLE LOCATION													
					8290	1613B	1613 TCDD only	1668 WHO	1668 Full List									
1H	9-29-15	1:10pm	Water	1	X													
2H	9-29-15	1:10pm	Water	1		X												
														E1500973	5			
RELINQUISHED BY:				RECEIVED BY:				TURNAROUND REQUIREMENTS				DELIVERABLES		INVOICE INFORMATION:		SAMPLE RECEIPT		
Signature: Jacquelyn Young				Signature: _____				Dioxin Rush.....5 days				I. Analytical Report		P.O. # _____		Opened by: _____		
Printed Name: Jacquelyn Young				Printed Name: _____				Dioxin Rush.....10 days				II. Analytical Report + QC		Bill to: _____		Inspected by: _____		
Firm: SJRC				Firm: _____				Dioxin STD.....15 days				IV. Data Validation Report (includes all raw data)		_____		Date: _____		
Date/Time: 9-29-15 14:30				Date/Time: _____				Contact lab for available TAT on PCBs								Time: _____		
RELINQUISHED BY:				RECEIVED BY:				Comments/Special Instructions:										
Signature: _____				Signature: _____														
Printed Name: _____				Printed Name: Ann Kelen														
Firm: _____				Firm: ACS HAZMS														
Date/Time: _____				Date/Time: 9-29-15 14:30														
														Sampler's Signature: Jacquelyn Young				

DISTRIBUTION: WHITE - Laboratory Copy; YELLOW - Client Copy



## Chain of Custody Form

Page \_\_\_\_\_ of \_\_\_\_\_

ALS Environmental  
North America Corporate Office  
10450 Stancill Road, Suite 210  
Houston, TX 77099

Customer Information:		Project Information:		ALS Project Manager:		Work Order #:		Parameter/Method Request for Analysis:									
Purchase Order:		Project Name:	San Jacinto River Coalition HANS	A	SVOCs 8270	B	VOCs 8260										
Work Order:		Project Number:		C	Metals + Mercury (Ba, Cd, Cr, Bo, Cu,Pb, Mn, Ni, Zn) 6020	D	BTEX 8260										
Company Name:	ALS Houston Dioxins	Address:	ALS Houston Dioxins	E		F											
Send Report To:	Arthi Kodur	Invoice Attn:	Arthi Kodur	G		H											
Address:	10450 Stancill Road Suite 210	Address:	10450 Stancill Road Suite 210	I		J											
City/State/Zip:	Houston, Texas 77099	City/State/Zip:	Houston, Texas 77099	K		L											
Phone:	281-575-2279	Phone:	281-575-2279	M		N											
Fax:		Fax:		O		P											
e-Mail Address:	arthi.kodur@aisglobal.com	e-Mail Address:		Q		R											
No.	Sample Description	Date	Time	Matrix	Pres.	#Samps	A	B	C	D	E	F	G	H	I	J	Hold
1	SJRC (b) (6) #3H	9-29-15	1:00 pm	Water		2	✓										
2	SJRC #4H	9-29-15	1:00 pm	Water		1		✓									
3	SJRC #5H	9-29-15	1:00 PM	Water		3		✓									
4																	
5																	
6																	
7																	
8																	
9																	
10																	
Sampler(s): Please Print & Sign: Jacqueline Young				Shipment Method:		Required Turnaround Time:				Results Due Date:							
						<input type="checkbox"/> Other _____ <input type="checkbox"/> STD 10 Wk Days <input type="checkbox"/> 5 Wk Days <input type="checkbox"/> 2 Wk Days <input type="checkbox"/> 24 Hour											
Relinquished by: <i>Jacqueline Young</i>		Date: 9-29-15	Time: 14:30	Received by: <i>Arthi Kodur</i>		Notes:											
Relinquished by:		Date:	Time:	Received by (Laboratory): <i>Arthi Kodur</i>		Cooler Temp.: <i>abt 15 1431</i>				QC Package: (Check Box Below):							
Logged by (Laboratory): <i>Arthi Kodur</i>		Date:	Time:	Checked by (Laboratory): <i>Arthi Kodur</i>						Level II: Standard QC		TRRP-Checklist					
										Level III: Std QC + Raw Data		TRRP Level IV					
										Level IV: SW846 CLP-Like							



**ALS Environmental**

**CHAIN OF CUSTODY - HRGC/HRMS - LABORATORY ANALYSIS REPORT FORM**

10450 Stancliff Road, Suite 210, Houston, TX 77099 | 713.266.1599 | alsusa.hrms@alsglobal.com | www.alsglobal.com

DATE \_\_\_\_\_ PAGE \_\_\_\_\_ OF \_\_\_\_\_

PAGE \_\_\_\_\_ OF \_\_\_\_\_



## Cooler Receipt Form

Project Chemist AK

Client/Project

San Jacinto River Coalition

Thermometer ID

8MS 4

Date/Time Received:

9/29/15 1431

Initials:

dk

Date/Time Logged in:

Initials

1. Method of delivery:  US Mail  Fed Ex  UPS  DHL  Courier  Client2. Samples received in:  Cooler  Box  Envelope  Other3. Were custody seals on coolers?  Yes  NoIf yes, how many  
and where?NoneWere they intact?  Yes  No  N/AWere they signed and dated?  Yes  No  N/A4. Packing Material:  Inserts  Baggies  Bubble Wrap  Gel Packs  Wet Ice  Sleeves  Other5. Foreign or Regulated Soil?  Yes  No Location of Sampling:

Cooler Tracking Number	COC ID	Date Opened	Time Opened	Opened By	Temp °F	Temp °C	Temp Blank?
N/A		9/29/15	1431	dk	-1.2		<input type="checkbox"/>
N/A		9/29/15	+431	dk	-1.8		<input type="checkbox"/>
			1430				<input type="checkbox"/>
							<input type="checkbox"/>

6. Were custody papers properly filled out (link, signed, dated, etc)?  Yes  No7. Did all bottles arrive in good condition (not broken, no signs of leakage)?  Yes  No8. Were all sample labels complete (i.e., sample ID, analysis, preservation, etc)?  Yes  No9. Were appropriate bottles/containers and volumes received for the requested tests?  Yes  No10. Did sample labels and tags agree with custody documents?  Yes  No

Notes, Discrepancies, &amp; Resolutions:

Service request Label:

E1500973

San Jacinto River Coalition  
San Jacinto River Coalition

5



# Cooler Receipt Form

Project Chemist

AK

Client/Project SSRC

Thermometer ID SMO 4

Date/Time Received: 12/2/15 12:55 Initials: AL Date/Time Logged in: 12/2/15 Initials AL

1. Method of delivery:  US Mail  Fed Ex  UPS  DHL  Courier  Client2. Samples received in:  Cooler  Box  Envelope  Other3. Were custody seals on coolers?  Yes  No If yes, how many and where?Were they intact?  Yes  No  N/AWere they signed and dated?  Yes  No  N/A

2 Seals

4. Packing Material:  Inserts  Baggies  Bubble Wrap  Gel Packs  Wet Ice  Sleeves  Other5. Foreign or Regulated Soil?  Yes  No Location of Sampling:

Cooler Tracking Number	COC ID	Date Opened	Time Opened	Opened By	Temp. °C	Temp Blank?
		12/2/15	13:00	AL	23/3.3	<input checked="" type="checkbox"/>
						<input type="checkbox"/>
						<input type="checkbox"/>
						<input type="checkbox"/>

6. Were custody papers properly filled out (ink, signed, dated, etc)?  Yes  No7. Did all bottles arrive in good condition (not broken, no signs of leakage)?  Yes  No8. Were all sample labels complete (i.e., sample ID, analysis, preservation, etc)?  Yes  No9. Were appropriate bottles/containers and volumes received for the requested tests?  Yes  No10. Did sample labels and tags agree with custody documents?  Yes  No

Notes, Discrepancies, &amp; Resolutions:

additional sample for PCB analysis

Service request Label:



10450 Stancliff Rd., Suite 210  
Houston, TX 77099  
T: +1 713 266 1599  
F: +1 713 266 1599  
[www.alsglobal.com](http://www.alsglobal.com)

## SAMPLE ACCEPTANCE POLICY

This policy outlines the criteria samples must meet to be accepted by ALS Environmental - Houston HRMS.

### Cooler Custody Seals (desirable, mandatory if specified in SAP):

- ✓ Intact on outside of cooler, signed and dated

### Chain-of-Custody (COC) documentation (mandatory):

The following is required on each COC:

- ✓ Sample ID, the location, date and time of collection, collector's name, preservation type, sample type, and any other special remarks concerning the sample. The COC must be completed in ink.
- ✓ Signature and date of relinquishing party.

In the absence of a COC at sample receipt, the COC will be requested from the client.

### Sample Integrity (mandatory):

Samples are inspected upon arrival to ensure that sample integrity was not compromised during transfer to the laboratory.

- ✓ Sample containers must arrive in good condition (not broken or leaking).
- ✓ Samples must be labeled appropriately, including Sample IDs, and requested test using durable labels and indelible ink.
- ✓ The correct type of sample bottle must be used for the method requested.
- ✓ An appropriate sample volume, or weight, must be received.
- ✓ Sample IDs and number of containers must reconcile with the COC.
- ✓ Samples must be received within the method defined holding time.

### Temperature Requirement (varies by sample matrix):

- ✓ Aqueous and Non-aqueous samples must be shipped and stored cold, at 0 to 6°C.
- ✓ Tissue samples must be shipped and stored frozen, at -20 to -10°C.
- ✓ Air samples are shipped and stored cold, at 0 to 6°C
- ✓ The sample temperature must be recorded on the COC

All cooler inspections are documented on the Cooler Receipt Form (CRF). A separate CRF is completed for each service request. Any samples not meeting the above criteria are noted on the CRF and the Project Manager notified. The Project Manager must resolve any sample integrity issues with the client prior to proceeding with the analysis. Such resolutions are documented in writing and filed with the project folder. Data associated with samples received outside of this acceptance policy will be qualified on the case narrative of the final report.



## Preparation Information Benchsheets

**ALS Environmental - Houston HRMS**  
10450 Stancliff Rd., Suite 210, Houston, TX 77099  
Phone (713)266-1599 Fax (713)266-0130  
[www.alsglobal.com](http://www.alsglobal.com)

RIGHT SOLUTIONS | RIGHT PARTNER

# ***Preparation Information Benchsheet***

**Prep Run#:** 246602

**Team:** Semivoa GCMS/LMCCRINK

**Prep WorkFlow:** OrgExtAq(365)

**Prep Method:** Method Sep Funnel/Jar

**Status:** Prepped

**Prep Date/Time:** 10/8/15 07:50 AM

#	Lab Code	Client ID	B#	Method /Test	pH	Matrix	Amt. Ext.	Sample Description
1	E1500939-001	10615148	.01	1613B/Dioxins Furans	7	Water	998mL	Yellow Cloudy
2	E1500947-001	2096625 001	.01	1613B/Dioxins Furans	7	Drinking Water	1059mL	Clear Liquid
3	E1500972-001	1R	.01	1613B/Dioxins Furans	7	Water	1044mL	Clear Liquid
4	E1500973-001	1H	.01	1613B/Dioxins Furans	7	Water	1050mL	Clear Liquid
5	E1500990-001	15J0011-01	.01	1613B/Dioxins Furans	7	Water	997mL	Clear Liquid
6	E1501001-001	Aqueous MDL Study-001	.01	1613B/Dioxins Furans	5	Water	1000mL	Clear Liquid
7	E1501001-002	Aqueous MDL Study-002	.02	1613B/Dioxins Furans	5	Water	1000mL	Clear Liquid
8	E1501001-003	Aqueous MDL Study-003	.02	1613B/Dioxins Furans	5	Water	1000mL	Clear Liquid
9	E1501001-004	Aqueous MDL Study-004	.02	1613B/Dioxins Furans	5	Water	1000mL	Clear Liquid
10	E1501001-005	Aqueous MDL Study-005	.02	1613B/Dioxins Furans	5	Water	1000mL	Clear Liquid
11	E1501001-006	Aqueous MDL Study-006	.02	1613B/Dioxins Furans	5	Water	1000mL	Clear Liquid
12	E1501001-007	Aqueous MDL Study-007	.02	1613B/Dioxins Furans	5	Water	1000mL	Clear Liquid
13	E1501001-008	Aqueous MDL Study-008	.02	1613B/Dioxins Furans	5	Water	1000mL	Clear Liquid
14	EQ1500602-01	MB		1613B/Dioxins Furans	5	Liquid	1000.0mL	
15	EQ1500602-02	LCS		1613B/Dioxins Furans	5	Liquid	1000mL	
16	EQ1500602-03	DLCS		1613B/Dioxins Furans	5	Liquid	1000mL	
17	R1505980-001RE	STE-07222015-24 HR	.01	1613B/Dioxin Furans Unadjusted	7	Water	1050.0mL	Clear Liquid

# Preparation Information Benchsheet

**Prep Run#:** 246602

**Team:** Semivoa GCMS/LMCCRINK

**Prep WorkFlow:** OrgExtAq(365)

**Prep Method:** Method Sep Funnel/Jar

**Status:** Prepped

**Prep Date/Time:** 10/8/15 07:50 AM

## Spiking Solutions

Name: 1613B/23/TO-9A MDL Native Solution	Inventory ID	78144	Logbook Ref:	0.02-0.2ng/mL LM 1/16/15	Expires On:	01/13/2016
E1501001-001 100.00µL	E1501001-002 100.00µL	E1501001-003 100.00µL	E1501001-004 100.00µL	E1501001-005 100.00µL	E1501001-006 100.00µL	
E1501001-007 100.00µL	E1501001-008 100.00µL					
Name: 1613B Matrix Working Standard	Inventory ID	84391	Logbook Ref:	84391 LM 9/21/15 2-20ng/ml	Expires On:	06/01/2016
EQ1500602-02 100.00µL	EQ1500602-02 100.00µL	EQ1500602-03 100.00µL	EQ1500602-03 100.00µL			
Name: 8290/1613B Cleanup Working Standard	Inventory ID	84635	Logbook Ref:	10/01/2015 CID 8.0 ng/ml EXT	Expires On:	03/29/2016
E1500939-001 100.00µL	E1500947-001 100.00µL	E1500972-001 100.00µL	E1500973-001 100.00µL	E1500990-001 100.00µL	E1501001-001 100.00µL	
E1501001-002 100.00µL	E1501001-003 100.00µL	E1501001-004 100.00µL	E1501001-005 100.00µL	E1501001-006 100.00µL	E1501001-007 100.00µL	
E1501001-008 100.00µL	EQ1500602-01 100.00µL	EQ1500602-01 100.00µL	EQ1500602-02 100.00µL	EQ1500602-02 100.00µL	EQ1500602-03 100.00µL	
EQ1500602-03 100.00µL	R1505980-001 100.00µL					
Name: 1613B Labeled Working Standard	Inventory ID	84765	Logbook Ref:	LM 10/7/15 2-4ng/ml 84765	Expires On:	03/08/2016
E1500939-001 1,000.00µL	E1500947-001 1,000.00µL	E1500972-001 1,000.00µL	E1500973-001 1,000.00µL	E1500990-001 1,000.00µL	E1501001-001 1,000.00µL	
E1501001-002 1,000.00µL	E1501001-003 1,000.00µL	E1501001-004 1,000.00µL	E1501001-005 1,000.00µL	E1501001-006 1,000.00µL	E1501001-007 1,000.00µL	
E1501001-008 1,000.00µL	EQ1500602-01 1,000.00µL	EQ1500602-01 1,000.00µL	EQ1500602-02 1,000.00µL	EQ1500602-02 1,000.00µL	EQ1500602-03 1,000.00µL	
EQ1500602-03 1,000.00µL	R1505980-001 1,000.00µL					

## Preparation Materials

Sensafe Free Chlorine WTR	LM 3/19/15 (79756)	Carbon, High Purity	LM 9/1/15 (83844)	Ethyl Acetate 99.9% Minimum	LM 10/8/15 (84814)
CHK				EtOAc	
Glass Wool	CID 09/22/2015 (84411)	Sulfuric Acid Reagent Grade H <sub>2</sub> SO <sub>4</sub>	LM 3/4/15 (79265)	Hexanes 95%	10/7/15 DE (84759)
Dichloromethane (Methylene Chloride) 99.9% MeCl <sub>2</sub>	LM 10/5/15 (84703)	Sodium Hydroxide Reagent Grade NaOH	LM 09/02/14 (74232)	Sodium Sulfate Anhydrous Reagent Grade Na <sub>2</sub> SO <sub>4</sub>	LM 9/24/15 (84454)
Tridecane (n-Tridecane)	LM 8/27/15 (83731)	ColorpHast pH-Indicator Strips	AL 03/24/15 (79846)	Silica Gel	Carlos Diaz (84410)
Toluene 99.9% Minimum	JP 10-07-15 (84760)				

## Preparation Steps

Step: Extraction	Step: Acid Clean	Step: Silica Gel Clean	Step: Final Volume
Started: 10/8/15 07:50	Started: 10/10/15 14:20 00:00	Started: 10/9/15 12:40	Started: 10/10/15 14:20
Finished: 10/8/15 09:40	Finished: 10/10/15 14:45 00:00	Finished: 10/9/15 14:10	Finished: 10/10/15 14:45
By: LMCCRINK	By: CDIAZ	By: CDIAZ	By: CDIAZ
Comments	Comments	Comments	Comments
	ak 10/12/15		

# *Preparation Information Benchsheet*

**Prep Run#:** 246602

**Team:** Semivoa GCMS/LMCCRINK

**Prep WorkFlow:** OrgExtAq(365)

**Prep Method:** Method Sep Funnel/Jar

**Status:** Prepped

**Prep Date/Time:** 10/8/15 07:50 AM

Comments: \_\_\_\_\_

Reviewed By: \_\_\_\_\_ ak \_\_\_\_\_ Date: 10/12/15 \_\_\_\_\_

Chain of Custody

Relinquished By: \_\_\_\_\_

Date: \_\_\_\_\_

Extracts Examined

Received By: \_\_\_\_\_

Date: \_\_\_\_\_

Yes      No



## Analytical Results

**ALS Environmental - Houston HRMS**  
10450 Stancliff Rd., Suite 210, Houston, TX 77099  
Phone (713)266-1599 Fax (713)266-0130  
[www.alsglobal.com](http://www.alsglobal.com)

RIGHT SOLUTIONS | RIGHT PARTNER

**ALS Group USA, Corp. dba ALS Environmental**

Analytical Report

**Client:** San Jacinto River Coalition  
**Project:** San Jacinto River Coalition/SJRC (b) (6)  
**Sample Matrix:** Water  
**Sample Name:** 1H  
**Lab Code:** E1500973-001

**Service Request:** E1500973  
**Date Collected:** 09/29/15 13:10  
**Date Received:** 09/29/15 14:30

## **Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS**

**Analysis Method:** 1613B **Date Analyzed:** 10/12/15 18:46  
**Prep Method:** Method Sep Funnel/Jar **Date Extracted:** 10/8/15  
**Sample Amount:** 1050mL **Instrument Name:** E-HRMS-08  
**Data File Name:** P600919 **GC Column:** DB-5MSUI  
**ICAL Date:** 08/19/15 **Blank File Name:** P600942  
**Cal Ver. File Name:** P600911

## Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	ND	U	0.557	4.76			1
1,2,3,7,8-PeCDD	ND	U	0.544	23.8			1
1,2,3,4,7,8-HxCDD	ND	U	0.319	23.8			1
1,2,3,6,7,8-HxCDD	ND	U	0.325	23.8			1
1,2,3,7,8,9-HxCDD	ND	U	0.291	23.8			1
1,2,3,4,6,7,8-HpCDD	1.31J		0.260	23.8	1.15	1.000	1
OCDD	6.38BJ		0.743	47.6	0.88	1.000	1
2,3,7,8-TCDF	ND	U	0.450	4.76			1
1,2,3,7,8-PeCDF	ND	U	0.319	23.8			1
2,3,4,7,8-PeCDF	ND	U	0.313	23.8			1
1,2,3,4,7,8-HxCDF	ND	U	0.254	23.8			1
1,2,3,6,7,8-HxCDF	ND	U	0.241	23.8			1
1,2,3,7,8,9-HxCDF	ND	U	0.277	23.8			1
2,3,4,6,7,8-HxCDF	ND	U	0.250	23.8			1
1,2,3,4,6,7,8-HpCDF	0.747J		0.281	23.8	1.16	1.000	1
1,2,3,4,7,8,9-HpCDF	ND	U	0.324	23.8			1
OCDF	1.02J		0.566	47.6	0.84	1.005	1

## ALS Group USA, Corp. dba ALS Environmental

## Analytical Report

**Client:** San Jacinto River Coalition  
**Project:** San Jacinto River Coalition/SJRC (b) (6)  
**Sample Matrix:** Water

**Sample Name:** 1H **Units:** pg/L  
**Lab Code:** E1500973-001 **Basis:** NA

**Service Request:** E1500973  
**Date Collected:** 09/29/15 13:10  
**Date Received:** 09/29/15 14:30

**Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS**

**Analysis Method:** 1613B **Date Analyzed:** 10/12/15 18:46  
**Prep Method:** Method Sep Funnel/Jar **Date Extracted:** 10/8/15  
**Sample Amount:** 1050mL **Instrument Name:** E-HRMS-08  
**GC Column:** DB-5MSUI

**Data File Name:** P600919 **Blank File Name:** P600942  
**ICAL Date:** 08/19/15 **Cal Ver. File Name:** P600911

**Native Analyte Results**

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
Total Tetra-Dioxins	ND	U	0.557	4.76			1
Total Penta-Dioxins	ND	U	0.544	23.8			1
Total Hexa-Dioxins	ND	U	0.311	23.8			1
Total Hepta-Dioxins	2.96J		0.260	23.8	1.09		1
Total Tetra-Furans	ND	U	0.450	4.76			1
Total Penta-Furans	ND	U	0.316	23.8			1
Total Hexa-Furans	ND	U	0.255	23.8			1
Total Hepta-Furans	0.747J		0.302	23.8	1.16		1

**ALS Group USA, Corp. dba ALS Environmental**

## Analytical Report

**Client:** San Jacinto River Coalition  
**Project:** San Jacinto River Coalition/SJRC (b) (6)  
**Sample Matrix:** Water  
**Sample Name:** 1H  
**Lab Code:** E1500973-001

**Service Request:** E1500973  
**Date Collected:** 09/29/15 13:10  
**Date Received:** 09/29/15 14:30

## **Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS**

**Analysis Method:** 1613B **Date Analyzed:** 10/12/15 18:46  
**Prep Method:** Method Sep Funnel/Jar **Date Extracted:** 10/8/15  
**Sample Amount:** 1050mL **Instrument Name:** E-HRMS-08  
**Data File Name:** P600919 **GC Column:** DB-5MSUI  
**JCAL Date:** 08/19/15 **Blank File Name:** P600942  
**Cal Ver. File Name:** P600911

## Labeled Standard Results

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	% Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	2000	1153.181	58		25-164	0.80	1.020
13C-1,2,3,7,8-PeCDD	2000	1524.894	76		25-181	1.57	1.182
13C-1,2,3,4,7,8-HxCDD	2000	1492.345	75		32-141	1.26	0.991
13C-1,2,3,6,7,8-HxCDD	2000	1631.871	82		28-130	1.27	0.994
13C-1,2,3,4,6,7,8-HpCDD	2000	1337.300	67		23-140	1.05	1.066
13C-OCDD	4000	2535.169	63		17-157	0.90	1.141
13C-2,3,7,8-TCDF	2000	1334.937	67		24-169	0.78	0.992
13C-1,2,3,7,8-PeCDF	2000	1511.057	76		24-185	1.57	1.140
13C-2,3,4,7,8-PeCDF	2000	1514.606	76		21-178	1.57	1.173
13C-1,2,3,4,7,8-HxCDF	2000	1399.824	70		26-152	0.51	0.971
13C-1,2,3,6,7,8-HxCDF	2000	1489.119	74		26-123	0.52	0.974
13C-1,2,3,7,8,9-HxCDF	2000	1452.784	73		29-147	0.51	1.008
13C-2,3,4,6,7,8-HxCDF	2000	1437.273	72		28-136	0.51	0.988
13C-1,2,3,4,6,7,8-HpCDF	2000	1183.965	59		28-143	0.44	1.042
13C-1,2,3,4,7,8,9-HpCDF	2000	1148.091	57		26-138	0.44	1.079
37Cl-2,3,7,8-TCDD	800	499.814	62		35-197	NA	1.021

## ALS Group USA, Corp. dba ALS Environmental

## Analytical Report

**Client:** San Jacinto River Coalition  
**Project:** San Jacinto River Coalition/SJRC (b) (6)  
**Sample Matrix:** Water

**Service Request:** E1500973  
**Date Collected:** 09/29/15 13:10  
**Date Received:** 09/29/15 14:30

**Sample Name:** 1H                    **Units:** pg/L  
**Lab Code:** E1500973-001            **Basis:** NA

**Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS**

**Analysis Method:** 1613B  
**Prep Method:** Method Sep Funnel/Jar

**Toxicity Equivalency Quotient**

Analyte Name	Result	DL	MRL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	ND	0.557	4.76	1	1	
1,2,3,7,8-PeCDD	ND	0.544	23.8	1	1	
1,2,3,4,7,8-HxCDD	ND	0.319	23.8	1	0.1	
1,2,3,6,7,8-HxCDD	ND	0.325	23.8	1	0.1	
1,2,3,7,8,9-HxCDD	ND	0.291	23.8	1	0.1	
1,2,3,4,6,7,8-HpCDD	<b>1.31</b>	0.260	23.8	1	0.01	0.0131
OCDD	<b>6.38</b>	0.743	47.6	1	0.0003	0.00191
2,3,7,8-TCDF	ND	0.450	4.76	1	0.1	
1,2,3,7,8-PeCDF	ND	0.319	23.8	1	0.03	
2,3,4,7,8-PeCDF	ND	0.313	23.8	1	0.3	
1,2,3,4,7,8-HxCDF	ND	0.254	23.8	1	0.1	
1,2,3,6,7,8-HxCDF	ND	0.241	23.8	1	0.1	
1,2,3,7,8,9-HxCDF	ND	0.277	23.8	1	0.1	
2,3,4,6,7,8-HxCDF	ND	0.250	23.8	1	0.1	
1,2,3,4,6,7,8-HpCDF	<b>0.747</b>	0.281	23.8	1	0.01	0.00747
1,2,3,4,7,8,9-HpCDF	ND	0.324	23.8	1	0.01	
OCDF	<b>1.02</b>	0.566	47.6	1	0.0003	0.000306
Total TEQ						0.0228

2005 WHO TEFs, ND = 0

## ALS Group USA, Corp. dba ALS Environmental

## Analytical Report

**Client:** San Jacinto River Coalition  
**Project:** San Jacinto River Coalition/SJRC (b) (6)  
**Sample Matrix:** Water  
**Sample Name:** 1H  
**Lab Code:** E1500973-001

**Service Request:** E1500973  
**Date Collected:** 09/29/15 13:10  
**Date Received:** 09/29/15 14:30

**Units:** pg/L  
**Basis:** NA

**Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS**

**Analysis Method:** 1613B  
**Prep Method:** Method Sep Funnel/Jar

**Toxicity Equivalency Quotient**

Analyte Name	Result	DL	MRL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	ND	0.557	4.76	1	1	
1,2,3,7,8-PeCDD	ND	0.544	23.8	1	1	
1,2,3,4,7,8-HxCDD	ND	0.319	23.8	1	0.1	
1,2,3,6,7,8-HxCDD	ND	0.325	23.8	1	0.1	
1,2,3,7,8,9-HxCDD	ND	0.291	23.8	1	0.1	
1,2,3,4,6,7,8-HpCDD	<b>1.31</b>	0.260	23.8	1	0.01	0.0131
OCDD	<b>6.38</b>	0.743	47.6	1	0.0001	0.000638
2,3,7,8-TCDF	ND	0.450	4.76	1	0.1	
1,2,3,7,8-PeCDF	ND	0.319	23.8	1	0.05	
2,3,4,7,8-PeCDF	ND	0.313	23.8	1	0.5	
1,2,3,4,7,8-HxCDF	ND	0.254	23.8	1	0.1	
1,2,3,6,7,8-HxCDF	ND	0.241	23.8	1	0.1	
1,2,3,7,8,9-HxCDF	ND	0.277	23.8	1	0.1	
2,3,4,6,7,8-HxCDF	ND	0.250	23.8	1	0.1	
1,2,3,4,6,7,8-HpCDF	<b>0.747</b>	0.281	23.8	1	0.01	0.00747
1,2,3,4,7,8,9-HpCDF	ND	0.324	23.8	1	0.01	
OCDF	<b>1.02</b>	0.566	47.6	1	0.0001	0.000102
Total TEQ						0.0213

1998 WHO TEFs, ND = 0

## ALS Group USA, Corp. dba ALS Environmental

## Analytical Report

**Client:** San Jacinto River Coalition  
**Project:** San Jacinto River Coalition/SJRC (b) (6)  
**Sample Matrix:** Water

**Sample Name:** Method Blank      **Units:** pg/L  
**Lab Code:** EQ1500602-01      **Basis:** NA

**Service Request:** E1500973  
**Date Collected:** NA  
**Date Received:** NA

**Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS**

**Analysis Method:** 1613B      **Date Analyzed:** 10/13/15 16:12  
**Prep Method:** Method Sep Funnel/Jar      **Date Extracted:** 10/8/15  
**Sample Amount:** 1000.0mL      **Instrument Name:** E-HRMS-08  
**GC Column:** DB-5MSUI

**Data File Name:** P600942      **Blank File Name:** P600942  
**ICAL Date:** 08/19/15      **Cal Ver. File Name:** P600939

**Native Analyte Results**

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	ND	U	0.739	5.00			1
1,2,3,7,8-PeCDD	ND	U	1.23	25.0			1
1,2,3,4,7,8-HxCDD	ND	U	0.424	25.0			1
1,2,3,6,7,8-HxCDD	ND	U	0.453	25.0			1
1,2,3,7,8,9-HxCDD	ND	U	0.397	25.0			1
1,2,3,4,6,7,8-HpCDD	ND	U	0.605	25.0			1
OCDD	2.09J		0.619	50.0	0.87	1.000	1
2,3,7,8-TCDF	ND	U	0.707	5.00			1
1,2,3,7,8-PeCDF	ND	U	0.368	25.0			1
2,3,4,7,8-PeCDF	ND	U	0.379	25.0			1
1,2,3,4,7,8-HxCDF	ND	U	0.202	25.0			1
1,2,3,6,7,8-HxCDF	ND	U	0.191	25.0			1
1,2,3,7,8,9-HxCDF	ND	U	0.223	25.0			1
2,3,4,6,7,8-HxCDF	ND	U	0.194	25.0			1
1,2,3,4,6,7,8-HpCDF	ND	U	0.275	25.0			1
1,2,3,4,7,8,9-HpCDF	ND	U	0.324	25.0			1
OCDF	ND	U	0.647	50.0			1

## ALS Group USA, Corp. dba ALS Environmental

## Analytical Report

**Client:** San Jacinto River Coalition      **Service Request:** E1500973  
**Project:** San Jacinto River Coalition/SJRC (b) (6)      **Date Collected:** NA  
**Sample Matrix:** Water      **Date Received:** NA

**Sample Name:** Method Blank      **Units:** pg/L  
**Lab Code:** EQ1500602-01      **Basis:** NA

**Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS**

**Analysis Method:** 1613B      **Date Analyzed:** 10/13/15 16:12  
**Prep Method:** Method Sep Funnel/Jar      **Date Extracted:** 10/8/15  
**Sample Amount:** 1000.0mL      **Instrument Name:** E-HRMS-08  
**GC Column:** DB-5MSUI

**Data File Name:** P600942      **Blank File Name:** P600942  
**ICAL Date:** 08/19/15      **Cal Ver. File Name:** P600939

**Native Analyte Results**

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
Total Tetra-Dioxins	ND	U	0.739	5.00			1
Total Penta-Dioxins	ND	U	1.23	25.0			1
Total Hexa-Dioxins	ND	U	0.423	25.0			1
Total Hepta-Dioxins	ND	U	0.605	25.0			1
Total Tetra-Furans	ND	U	0.707	5.00			1
Total Penta-Furans	ND	U	0.373	25.0			1
Total Hexa-Furans	ND	U	0.202	25.0			1
Total Hepta-Furans	ND	U	0.300	25.0			1

## ALS Group USA, Corp. dba ALS Environmental

## Analytical Report

**Client:** San Jacinto River Coalition  
**Project:** San Jacinto River Coalition/SJRC (b) (6)  
**Sample Matrix:** Water

**Sample Name:** Method Blank  
**Lab Code:** EQ1500602-01

**Service Request:** E1500973  
**Date Collected:** NA  
**Date Received:** NA

**Units:** Percent  
**Basis:** NA

**Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS**

**Analysis Method:** 1613B  
**Prep Method:** Method Sep Funnel/Jar  
**Sample Amount:** 1000.0mL

**Date Analyzed:** 10/13/15 16:12  
**Date Extracted:** 10/8/15  
**Instrument Name:** E-HRMS-08  
**GC Column:** DB-5MSUI

**Data File Name:** P600942  
**ICAL Date:** 08/19/15

**Blank File Name:** P600942  
**Cal Ver. File Name:** P600939

**Labeled Standard Results**

<b>Labeled Compounds</b>	<b>Spike Conc.(pg)</b>	<b>Conc. Found (pg)</b>	<b>% Rec</b>	<b>Q</b>	<b>Control Limits</b>	<b>Ion Ratio</b>	<b>RRT</b>
13C-2,3,7,8-TCDD	2000	1205.804	60		25-164	0.80	1.020
13C-1,2,3,7,8-PeCDD	2000	1543.149	77		25-181	1.59	1.183
13C-1,2,3,4,7,8-HxCDD	2000	1621.249	81		32-141	1.26	0.991
13C-1,2,3,6,7,8-HxCDD	2000	1745.435	87		28-130	1.26	0.993
13C-1,2,3,4,6,7,8-HpCDD	2000	1421.415	71		23-140	1.07	1.066
13C-OCDD	4000	2645.996	66		17-157	0.89	1.140
13C-2,3,7,8-TCDF	2000	1392.112	70		24-169	0.78	0.993
13C-1,2,3,7,8-PeCDF	2000	1545.086	77		24-185	1.57	1.141
13C-2,3,4,7,8-PeCDF	2000	1533.219	77		21-178	1.56	1.173
13C-1,2,3,4,7,8-HxCDF	2000	1482.794	74		26-152	0.51	0.971
13C-1,2,3,6,7,8-HxCDF	2000	1600.588	80		26-123	0.51	0.974
13C-1,2,3,7,8,9-HxCDF	2000	1522.801	76		29-147	0.52	1.008
13C-2,3,4,6,7,8-HxCDF	2000	1562.132	78		28-136	0.51	0.987
13C-1,2,3,4,6,7,8-HpCDF	2000	1331.638	67		28-143	0.43	1.041
13C-1,2,3,4,7,8,9-HpCDF	2000	1222.918	61		26-138	0.44	1.079
37Cl-2,3,7,8-TCDD	800	533.664	67		35-197	NA	1.021



## Accuracy & Precision

**ALS Environmental - Houston HRMS**  
10450 Stancliff Rd., Suite 210, Houston TX 77099  
Phone (713)266-1599 Fax (713)266-0130  
[www.alsglobal.com](http://www.alsglobal.com)

RIGHT SOLUTIONS | RIGHT PARTNER

**ALS Group USA, Corp.**  
dba ALS Environmental

QA/QC Report

<b>Client:</b>	San Jacinto River Coalition	<b>Service Request:</b>	E1500973
<b>Project:</b>	San Jacinto River Coalition/SJRC [b] (6)	<b>Date Analyzed:</b>	10/14/15
<b>Sample Matrix:</b>	Water	<b>Date Extracted:</b>	10/08/15

**Duplicate Lab Control Sample Summary**

**Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS**

<b>Analysis Method:</b>	1613B	<b>Units:</b>	pg/L
<b>Prep Method:</b>	Method Sep Funnel/Jar	<b>Basis:</b>	NA
		<b>Analysis Lot:</b>	468365

**Lab Control Sample**  
**EQ1500602-02**

**Duplicate Lab Control Sample**  
**EQ1500602-03**

Analyte Name	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
1,2,3,4,6,7,8-HxCDD	1040	1000	104	1080	1000	108	70-140	3	50
1,2,3,4,7,8-HxCDD	1120	1000	112	1150	1000	115	70-164	2	50
1,2,3,6,7,8-HxCDD	1100	1000	110	1130	1000	113	76-134	3	50
1,2,3,7,8,9-HxCDD	1010	1000	101	1070	1000	107	64-162	5	50
1,2,3,7,8-PeCDD	1180	1000	118	1210	1000	121	70-142	2	50
2,3,7,8-TCDD	221	200	111	232	200	116	67-158	5	50
OCDD	2210	2000	110	2230	2000	111	78-144	1	50
1,2,3,4,6,7,8-HxCDF	1080	1000	108	1090	1000	109	82-122	1	50
1,2,3,4,7,8,9-HxCDF	1050	1000	105	1080	1000	108	78-138	2	50
1,2,3,4,7,8-HxCDF	1080	1000	108	1130	1000	113	72-134	4	50
1,2,3,6,7,8-HxCDF	1060	1000	106	1080	1000	108	84-130	2	50
1,2,3,7,8,9-HxCDF	1020	1000	102	1040	1000	104	78-130	2	50
1,2,3,7,8-PeCDF	1010	1000	101	1050	1000	105	80-134	4	50
2,3,4,6,7,8-HxCDF	1080	1000	108	1090	1000	109	70-156	1	50
2,3,4,7,8-PeCDF	1090	1000	109	1120	1000	112	68-160	3	50
2,3,7,8-TCDF	213	200	107	219	200	110	75-158	3	50
OCDF	2190	2000	109	2210	2000	110	63-170	1	50

## ALS Group USA, Corp. dba ALS Environmental

## Analytical Report

**Client:** San Jacinto River Coalition  
**Project:** San Jacinto River Coalition/SJRC (b) (6)  
**Sample Matrix:** Water

**Sample Name:** Lab Control Sample  
**Lab Code:** EQ1500602-02

**Service Request:** E1500973  
**Date Collected:** NA  
**Date Received:** NA

**Units:** pg/L  
**Basis:** NA

**Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS**

**Analysis Method:** 1613B  
**Prep Method:** Method Sep Funnel/Jar  
**Sample Amount:** 1000mL

**Date Analyzed:** 10/14/15 11:56  
**Date Extracted:** 10/8/15  
**Instrument Name:** E-HRMS-08  
**GC Column:** DB-5MSUI

**Data File Name:** P600966  
**ICAL Date:** 08/19/15

**Blank File Name:** P600942  
**Cal Ver. File Name:** P600954

**Native Analyte Results**

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	221		1.48	5.00	0.74	1.001	1
1,2,3,7,8-PeCDD	1180		2.17	25.0	1.58	1.001	1
1,2,3,4,7,8-HxCDD	1120		1.84	25.0	1.26	1.000	1
1,2,3,6,7,8-HxCDD	1100		1.92	25.0	1.27	1.000	1
1,2,3,7,8,9-HxCDD	1010		1.70	25.0	1.24	1.007	1
1,2,3,4,6,7,8-HpCDD	1040		1.32	25.0	1.03	1.000	1
OCDD	2210		1.11	50.0	0.88	1.000	1
2,3,7,8-TCDF	213		1.38	5.00	0.76	1.001	1
1,2,3,7,8-PeCDF	1010		1.57	25.0	1.55	1.000	1
2,3,4,7,8-PeCDF	1090		1.60	25.0	1.53	1.001	1
1,2,3,4,7,8-HxCDF	1080		0.816	25.0	1.23	1.000	1
1,2,3,6,7,8-HxCDF	1060		0.799	25.0	1.23	1.000	1
1,2,3,7,8,9-HxCDF	1020		1.02	25.0	1.24	1.000	1
2,3,4,6,7,8-HxCDF	1080		0.834	25.0	1.20	1.000	1
1,2,3,4,6,7,8-HpCDF	1080		1.41	25.0	1.03	1.000	1
1,2,3,4,7,8,9-HpCDF	1050		1.76	25.0	1.01	1.000	1
OCDF	2190		1.41	50.0	0.89	1.005	1

## ALS Group USA, Corp. dba ALS Environmental

## Analytical Report

**Client:** San Jacinto River Coalition      **Service Request:** E1500973  
**Project:** San Jacinto River Coalition/SJRC (b) (6)      **Date Collected:** NA  
**Sample Matrix:** Water      **Date Received:** NA

**Sample Name:** Lab Control Sample      **Units:** pg/L  
**Lab Code:** EQ1500602-02      **Basis:** NA

**Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS**

**Analysis Method:** 1613B      **Date Analyzed:** 10/14/15 11:56  
**Prep Method:** Method Sep Funnel/Jar      **Date Extracted:** 10/8/15  
**Sample Amount:** 1000mL      **Instrument Name:** E-HRMS-08  
**GC Column:** DB-5MSUI

**Data File Name:** P600966      **Blank File Name:** P600942  
**ICAL Date:** 08/19/15      **Cal Ver. File Name:** P600954

**Native Analyte Results**

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
Total Tetra-Dioxins	221		1.48	5.00	0.74		1
Total Penta-Dioxins	1180		2.17	25.0	1.58		1
Total Hexa-Dioxins	3230		1.82	25.0	1.26		1
Total Hepta-Dioxins	1040		1.32	25.0	1.03		1
Total Tetra-Furans	215		1.38	5.00	0.76		1
Total Penta-Furans	2120		1.58	25.0	1.75		1
Total Hexa-Furans	4230		0.859	25.0	1.23		1
Total Hepta-Furans	2130		1.57	25.0	1.03		1

**ALS Group USA, Corp. dba ALS Environmental**

## Analytical Report

**Client:** San Jacinto River Coalition  
**Project:** San Jacinto River Coalition/SJRC (b) (6)  
**Sample Matrix:** Water

**Sample Name:** Lab Control Sample  
**Lab Code:** EQ1500602-02

**Service Request:** E1500973  
**Date Collected:** NA  
**Date Received:** NA

## **Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS**

**Analysis Method:** 1613B **Date Analyzed:** 10/14/15 11:56  
**Prep Method:** Method Sep Funnel/Jar **Date Extracted:** 10/8/15  
**Sample Amount:** 1000mL **Instrument Name:** E-HRMS-08  
**Data File Name:** P600966 **GC Column:** DB-5MSUI  
**ICAL Date:** 08/19/15 **Blank File Name:** P600942  
**Cal Ver. File Name:** P600954

## Labeled Standard Results

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	% Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	2000	1243.963	62		25-164	0.79	1.020
13C-1,2,3,7,8-PeCDD	2000	1627.557	81		25-181	1.58	1.182
13C-1,2,3,4,7,8-HxCDD	2000	1636.844	82		32-141	1.25	0.991
13C-1,2,3,6,7,8-HxCDD	2000	1788.837	89		28-130	1.27	0.994
13C-1,2,3,4,6,7,8-HpCDD	2000	1423.636	71		23-140	1.07	1.066
13C-OCDD	4000	2928.700	73		17-157	0.89	1.141
13C-2,3,7,8-TCDF	2000	1444.864	72		24-169	0.78	0.993
13C-1,2,3,7,8-PeCDF	2000	1637.271	82		24-185	1.58	1.141
13C-2,3,4,7,8-PeCDF	2000	1604.405	80		21-178	1.55	1.173
13C-1,2,3,4,7,8-HxCDF	2000	1521.511	76		26-152	0.51	0.972
13C-1,2,3,6,7,8-HxCDF	2000	1626.638	81		26-123	0.51	0.975
13C-1,2,3,7,8,9-HxCDF	2000	1388.518	69		29-147	0.52	1.008
13C-2,3,4,6,7,8-HxCDF	2000	1499.234	75		28-136	0.52	0.988
13C-1,2,3,4,6,7,8-HpCDF	2000	1329.878	66		28-143	0.43	1.042
13C-1,2,3,4,7,8,9-HpCDF	2000	1204.385	60		26-138	0.43	1.079
37Cl-2,3,7,8-TCDD	800	539.098	67		35-197	NA	1.021

## ALS Group USA, Corp. dba ALS Environmental

## Analytical Report

**Client:** San Jacinto River Coalition **Service Request:** E1500973  
**Project:** San Jacinto River Coalition/SJRC (b) (6) **Date Collected:** NA  
**Sample Matrix:** Water **Date Received:** NA

**Sample Name:** Duplicate Lab Control Sample **Units:** pg/L  
**Lab Code:** EQ1500602-03 **Basis:** NA

**Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS**

**Analysis Method:** 1613B **Date Analyzed:** 10/14/15 12:45  
**Prep Method:** Method Sep Funnel/Jar **Date Extracted:** 10/8/15  
**Sample Amount:** 1000mL **Instrument Name:** E-HRMS-08  
**GC Column:** DB-5MSUI

**Data File Name:** P600967 **Blank File Name:** P600942  
**ICAL Date:** 08/19/15 **Cal Ver. File Name:** P600954

## Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	232	0.379	5.00	0.78	1.001	1	
1,2,3,7,8-PeCDD	1210	0.502	25.0	1.55	1.000	1	
1,2,3,4,7,8-HxCDD	1150	0.368	25.0	1.25	1.000	1	
1,2,3,6,7,8-HxCDD	1130	0.379	25.0	1.25	1.000	1	
1,2,3,7,8,9-HxCDD	1070	0.337	25.0	1.22	1.007	1	
1,2,3,4,6,7,8-HpCDD	1080	0.432	25.0	1.03	1.000	1	
OCDD	2230	0.365	50.0	0.88	1.000	1	
2,3,7,8-TCDF	219	0.485	5.00	0.75	1.001	1	
1,2,3,7,8-PeCDF	1050	0.408	25.0	1.55	1.001	1	
2,3,4,7,8-PeCDF	1120	0.412	25.0	1.53	1.000	1	
1,2,3,4,7,8-HxCDF	1130	0.250	25.0	1.23	1.000	1	
1,2,3,6,7,8-HxCDF	1080	0.230	25.0	1.23	1.000	1	
1,2,3,7,8,9-HxCDF	1040	0.276	25.0	1.22	1.000	1	
2,3,4,6,7,8-HxCDF	1090	0.239	25.0	1.23	1.000	1	
1,2,3,4,6,7,8-HpCDF	1090	1.04	25.0	1.03	1.000	1	
1,2,3,4,7,8,9-HpCDF	1080	1.22	25.0	1.02	1.000	1	
OCDF	2210	0.367	50.0	0.90	1.005	1	

## ALS Group USA, Corp. dba ALS Environmental

## Analytical Report

**Client:** San Jacinto River Coalition      **Service Request:** E1500973  
**Project:** San Jacinto River Coalition/SJRC (b) (6)      **Date Collected:** NA  
**Sample Matrix:** Water      **Date Received:** NA

**Sample Name:** Duplicate Lab Control Sample      **Units:** pg/L  
**Lab Code:** EQ1500602-03      **Basis:** NA

**Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS**

**Analysis Method:** 1613B      **Date Analyzed:** 10/14/15 12:45  
**Prep Method:** Method Sep Funnel/Jar      **Date Extracted:** 10/8/15  
**Sample Amount:** 1000mL      **Instrument Name:** E-HRMS-08  
**GC Column:** DB-5MSUI

**Data File Name:** P600967      **Blank File Name:** P600942  
**ICAL Date:** 08/19/15      **Cal Ver. File Name:** P600954

**Native Analyte Results**

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
Total Tetra-Dioxins	232		0.379	5.00	0.78		1
Total Penta-Dioxins	1210		0.502	25.0	1.55		1
Total Hexa-Dioxins	3350		0.362	25.0	1.25		1
Total Hepta-Dioxins	1080		0.432	25.0	0.90		1
Total Tetra-Furans	219		0.485	5.00	0.75		1
Total Penta-Furans	2170		0.410	25.0	1.55		1
Total Hexa-Furans	4340		0.248	25.0	1.23		1
Total Hepta-Furans	2170		1.13	25.0	1.03		1

**ALS Group USA, Corp. dba ALS Environmental**

## Analytical Report

**Client:** San Jacinto River Coalition  
**Project:** San Jacinto River Coalition/SJRC (b) (6)  
**Sample Matrix:** Water

**Sample Name:** Duplicate Lab Control Sample  
**Lab Code:** EQ1500602-03

**Service Request:** E1500973  
**Date Collected:** NA  
**Date Received:** NA  
  
**Units:** Percent  
**Basis:** NA

## **Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS**

**Analysis Method:** 1613B **Date Analyzed:** 10/14/15 12:45  
**Prep Method:** Method Sep Funnel/Jar **Date Extracted:** 10/8/15  
**Sample Amount:** 1000mL **Instrument Name:** E-HRMS-08  
**Data File Name:** P600967 **GC Column:** DB-5MSUI  
**ICAL Date:** 08/19/15 **Blank File Name:** P600942  
**Cal Ver. File Name:** P600954

## Labeled Standard Results

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	% Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	2000	1266.519	63		25-164	0.80	1.019
13C-1,2,3,7,8-PeCDD	2000	1726.806	86		25-181	1.58	1.182
13C-1,2,3,4,7,8-HxCDD	2000	1675.694	84		32-141	1.27	0.991
13C-1,2,3,6,7,8-HxCDD	2000	1846.407	92		28-130	1.25	0.994
13C-1,2,3,4,6,7,8-HpCDD	2000	1502.014	75		23-140	1.05	1.066
13C-OCDD	4000	3109.667	78		17-157	0.89	1.141
13C-2,3,7,8-TCDF	2000	1431.389	72		24-169	0.79	0.992
13C-1,2,3,7,8-PeCDF	2000	1692.167	85		24-185	1.56	1.141
13C-2,3,4,7,8-PeCDF	2000	1696.197	85		21-178	1.57	1.173
13C-1,2,3,4,7,8-HxCDF	2000	1528.751	76		26-152	0.51	0.971
13C-1,2,3,6,7,8-HxCDF	2000	1657.651	83		26-123	0.52	0.974
13C-1,2,3,7,8,9-HxCDF	2000	1567.363	78		29-147	0.51	1.008
13C-2,3,4,6,7,8-HxCDF	2000	1609.478	80		28-136	0.52	0.988
13C-1,2,3,4,6,7,8-HpCDF	2000	1357.743	68		28-143	0.43	1.042
13C-1,2,3,4,7,8,9-HpCDF	2000	1307.443	65		26-138	0.43	1.079
37Cl-2,3,7,8-TCDD	800	542.189	68		35-197	NA	1.020



## Chromatograms and Selected Ion Monitoring

**ALS Environmental - Houston HRMS**  
10450 Stancliff Rd., Suite 320, Houston TX 77099  
Phone (713)266-1599 Fax (713)266-0130  
[www.alsglobal.com](http://www.alsglobal.com)

RIGHT SOLUTIONS | RIGHT PARTNER

ALS ENVIRONMENTAL  
Sample Response Summary

CLIENT ID.  
1H

Run #14    Filename P600919    Samp: 1    Inj: 1    Acquired: 12-OCT-15 18:46:02  
Processed: 21-OCT-15 19:00:22    Sample ID: E1500973-001

Typ	Name	RT-1	Resp 1	Resp 2	Ratio	Meet	Mod?	RRF
1 Unk	2,3,7,8-TCDF	NotFnd	*	*	*	no	no	0.941
2 Unk	1,2,3,7,8-PeCDF	NotFnd	*	*	*	no	no	0.987
3 Unk	2,3,4,7,8-PeCDF	NotFnd	*	*	*	no	no	0.934
4 Unk	1,2,3,4,7,8-HxCDF	NotFnd	*	*	*	no	no	1.189
5 Unk	1,2,3,6,7,8-HxCDF	NotFnd	*	*	*	no	yes	1.126
6 Unk	2,3,4,6,7,8-HxCDF	NotFnd	*	*	*	no	no	1.116
7 Unk	1,2,3,7,8,9-HxCDF	NotFnd	*	*	*	no	no	1.158
8 Unk	1,2,3,4,6,7,8-HpCDF	38:33	3.129e+01	2.691e+01	1.16	yes	no	1.373
9 Unk	1,2,3,4,7,8,9-HpCDF	NotFnd	*	*	*	no	no	1.287
10 Unk	OCDF	42:24	2.588e+01	3.094e+01	0.84	yes	no	1.257
11 Unk	2,3,7,8-TCDD	NotFnd	*	*	*	no	no	1.010
12 Unk	1,2,3,7,8-PeCDD	NotFnd	*	*	*	no	no	0.932
13 Unk	1,2,3,4,7,8-HxCDD	NotFnd	*	*	*	no	yes	1.026
14 Unk	1,2,3,6,7,8-HxCDD	NotFnd	*	*	*	no	no	1.021
15 Unk	1,2,3,7,8,9-HxCDD	NotFnd	*	*	*	no	no	1.133
16 Unk	1,2,3,4,6,7,8-HpCDD	39:27	4.706e+01	4.076e+01	1.15	yes	no	1.034
17 Unk	OCDD	42:12	1.476e+02	1.669e+02	0.88	yes	no	1.111
18 IS	13C-2,3,7,8-TCDF	28:10	7.726e+04	9.902e+04	0.78	yes	no	1.379
19 IS	13C-1,2,3,7,8-PeCDF	32:22	1.287e+05	8.192e+04	1.57	yes	no	1.456
20 IS	13C-2,3,4,7,8-PeCDF	33:17	1.296e+05	8.277e+04	1.57	yes	no	1.465
21 IS	13C-1,2,3,4,7,8-HxCDF	35:56	5.307e+04	1.032e+05	0.51	yes	no	1.075
22 IS	13C-1,2,3,6,7,8-HxCDF	36:03	6.092e+04	1.182e+05	0.52	yes	no	1.158
23 IS	13C-2,3,4,6,7,8-HxCDF	36:33	5.741e+04	1.118e+05	0.51	yes	no	1.133
24 IS	13C-1,2,3,7,8,9-HxCDF	37:18	5.186e+04	1.026e+05	0.51	yes	no	1.024
25 IS	13C-1,2,3,4,6,7,8-HpCDF	38:33	3.300e+04	7.520e+04	0.44	yes	no	0.880
26 IS	13C-1,2,3,4,7,8,9-HpCDF	39:55	3.333e+04	7.571e+04	0.44	yes	no	0.914
27 IS	13C-2,3,7,8-TCDD	28:57	5.850e+04	7.321e+04	0.80	yes	no	1.193
28 IS	13C-1,2,3,7,8-PeCDD	33:33	9.759e+04	6.208e+04	1.57	yes	no	1.094
29 IS	13C-1,2,3,4,7,8-HxCDD	36:40	7.836e+04	6.213e+04	1.26	yes	no	0.906
30 IS	13C-1,2,3,6,7,8-HxCDD	36:46	8.144e+04	6.431e+04	1.27	yes	no	0.860
31 IS	13C-1,2,3,4,6,7,8-HpCDD	39:27	6.353e+04	6.044e+04	1.05	yes	no	0.892
32 IS	13C-OCDD	42:12	7.997e+04	8.904e+04	0.90	yes	no	0.642
33 RS/RT	13C-1,2,3,4-TCDD	28:23	8.540e+04	1.061e+05	0.81	yes	no	-
34 RS/RT	13C-1,2,3,7,8,9-HxCDD	37:00	1.161e+05	9.167e+04	1.27	yes	no	-
35 C/Up	37Cl-2,3,7,8-TCDD	28:58	6.045e+04				no	1.263

$$(1.476e+02 + 1.669e+02) \times 4000 \text{ pg} \times 1$$

$$\text{OCDD} = \frac{(7.997e+04 + 8.904e+04) \times 10^{50} \text{ pg}}{(7.997e+04 + 8.904e+04) \times 10^0 / 100 \times 1.111} = 6.38 \text{ pg/L}$$

MM 10/23/15

ALS ENVIRONMENTAL -- HOUSTON HRMS  
10450 Stancliff Rd., Suite 115  
Houston, TX 77099  
Office (281) 530-5656. Fax (281) 530-5887

ALS ENVIRONMENTAL  
Signal/Noise Height Ratio Summary

CLIENT ID.  
1H

Run #14   Filename P600919              Samp: 1    Inj: 1    Acquired: 12-OCT-15 18:46:02  
Processed: 21-OCT-15 19:00:22              LAB. ID: E1500973-001

	Name	Signal 1	Noise 1	S/N Rat.1	Signal 2	Noise 2	S/N Rat.2
1	2,3,7,8-TCDF	*	9.52e+02	*	*	1.94e+03	*
2	1,2,3,7,8-PeCDF	*	6.48e+02	*	*	1.94e+03	*
3	2,3,4,7,8-PeCDF	*	6.48e+02	*	*	1.94e+03	*
4	1,2,3,4,7,8-HxCDF	*	1.50e+03	*	*	7.24e+02	*
5	1,2,3,6,7,8-HxCDF	*	1.50e+03	*	*	7.24e+02	*
6	2,3,4,6,7,8-HxCDF	*	1.50e+03	*	*	7.24e+02	*
7	1,2,3,7,8,9-HxCDF	*	1.50e+03	*	*	7.24e+02	*
8	1,2,3,4,6,7,8-HpCDF	6.52e+03	1.02e+03	6.4e+00	6.47e+03	9.48e+02	6.8e+00
9	1,2,3,4,7,8,9-HpCDF	*	1.02e+03	*	*	9.48e+02	*
10	OCDF	4.70e+03	9.64e+02	4.9e+00	5.65e+03	1.44e+03	3.9e+00
11	2,3,7,8-TCDD	*	1.76e+03	*	*	1.32e+03	*
12	1,2,3,7,8-PeCDD	*	2.06e+03	*	*	1.33e+03	*
13	1,2,3,4,7,8-HxCDD	*	8.52e+02	*	*	1.36e+03	*
14	1,2,3,6,7,8-HxCDD	*	8.52e+02	*	*	1.36e+03	*
15	1,2,3,7,8,9-HxCDD	*	8.52e+02	*	*	1.36e+03	*
16	1,2,3,4,6,7,8-HpCDD	9.13e+03	7.84e+02	1.2e+01	7.71e+03	7.36e+02	1.0e+01
17	OCDD	2.75e+04	1.17e+03	2.4e+01	3.17e+04	1.63e+03	1.9e+01
18	13C-2,3,7,8-TCDF	1.42e+07	3.19e+03	4.4e+03	1.82e+07	1.85e+03	9.8e+03
19	13C-1,2,3,7,8-PeCDF	2.38e+07	1.59e+03	1.5e+04	1.53e+07	1.34e+03	1.1e+04
20	13C-2,3,4,7,8-PeCDF	2.58e+07	1.59e+03	1.6e+04	1.64e+07	1.34e+03	1.2e+04
21	13C-1,2,3,4,7,8-HxCDF	1.19e+07	1.78e+03	6.7e+03	2.32e+07	1.83e+03	1.3e+04
22	13C-1,2,3,6,7,8-HxCDF	1.32e+07	1.78e+03	7.4e+03	2.56e+07	1.83e+03	1.4e+04
23	13C-2,3,4,6,7,8-HxCDF	1.28e+07	1.78e+03	7.2e+03	2.49e+07	1.83e+03	1.4e+04
24	13C-1,2,3,7,8,9-HxCDF	1.11e+07	1.78e+03	6.2e+03	2.18e+07	1.83e+03	1.2e+04
25	13C-1,2,3,4,6,7,8-HpCDF	7.44e+06	4.69e+03	1.6e+03	1.68e+07	6.60e+03	2.5e+03
26	13C-1,2,3,4,7,8,9-HpCDF	6.87e+06	4.69e+03	1.5e+03	1.56e+07	6.60e+03	2.4e+03
27	13C-2,3,7,8-TCDD	1.16e+07	5.20e+03	2.2e+03	1.44e+07	2.62e+03	5.5e+03
28	13C-1,2,3,7,8-PeCDD	1.95e+07	1.41e+03	1.4e+04	1.22e+07	1.02e+03	1.2e+04
29	13C-1,2,3,4,7,8-HxCDD	1.78e+07	4.04e+03	4.4e+03	1.43e+07	2.24e+03	6.4e+03
30	13C-1,2,3,6,7,8-HxCDD	1.76e+07	4.04e+03	4.4e+03	1.40e+07	2.24e+03	6.2e+03
31	13C-1,2,3,4,6,7,8-HpCDD	1.37e+07	1.80e+03	7.6e+03	1.32e+07	1.52e+03	8.7e+03
32	13C-OCDD	1.53e+07	1.50e+03	1.0e+04	1.69e+07	1.55e+03	1.1e+04
33	13C-1,2,3,4-TCDD	1.65e+07	5.20e+03	3.2e+03	2.04e+07	2.62e+03	7.8e+03
34	13C-1,2,3,7,8,9-HxCDD	2.57e+07	4.04e+03	6.4e+03	2.01e+07	2.24e+03	9.0e+03
35	37Cl-2,3,7,8-TCDD	1.15e+07	1.54e+03	7.5e+03			

---Sample Calculation---

$$2.5 \times (1.756e+03 + 1.324e+03) \times 2000$$

$$\text{D/L TCDD} = \frac{(1.155e+07 + 1.441e+07) \times ( )}{(1.155e+07 + 1.441e+07) \times ( )} = 1.010$$

---

ALS ENVIRONMENTAL  
10450 Stancliff Rd., Suite 115  
Houston, TX 77099  
Office: (281) 530-5656. Fax: (281) 530-5887

ALS ENVIRONMENTAL  
Peak List Summary

CLIENT ID.

---

1H

---

Entry: 43      Totals Name: Total Hepta-Furans

Run: 14      File: P600919      Sample:1      Injection:1      Function:4

Acquired: 12-OCT-15 18:46:02      Processed: 21-OCT-15 19:00:22

Mass: 407.7820 409.7790      Tot Response: 5.82e+01      RRF: 1.329

#	RT	Resp	Resp Ratio	Meet Tot Resp	Name	Mod1?	Mod2	
1	38:33	3.13e+01	2.69e+01	1.16	yes 5.82e+01	1,2,3,4,6,7,8-HpCDF	n	n

---

ALS ENVIRONMENTAL  
10450 Stancliff Rd., Suite 115  
Houston, TX 77099  
Office (281) 530-5656. Fax (281) 530-5887

ALS ENVIRONMENTAL  
Peak List Summary

CLIENT ID.

---

1H

---

Entry: 44      Totals Name: Total Hepta-Dioxins

Run: 14      File: P600919      Sample:1      Injection:1      Function:4

Acquired: 12-OCT-15 18:46:02      Processed: 21-OCT-15 19:00:22

Mass: 423.7770    425.7740      Tot Response: 1.99e+02    RRF: 1.034

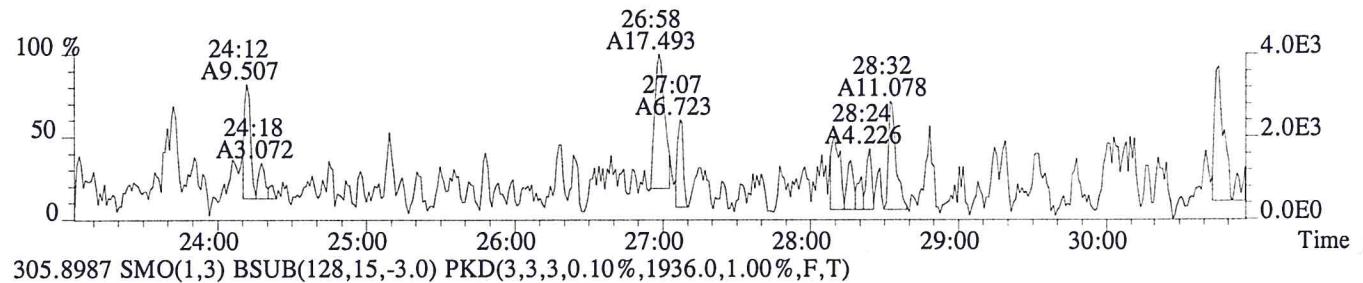
#      RT      Resp      Resp Ratio      Meet Tot Resp      Name      Mod1? Mod2

1	38:47	5.80e+01	5.33e+01	1.09	yes	1.11e+02		n	n
2	39:27	4.71e+01	4.08e+01	1.15	yes	8.78e+01	1,2,3,4,6,7,8-HpCDD	n	n

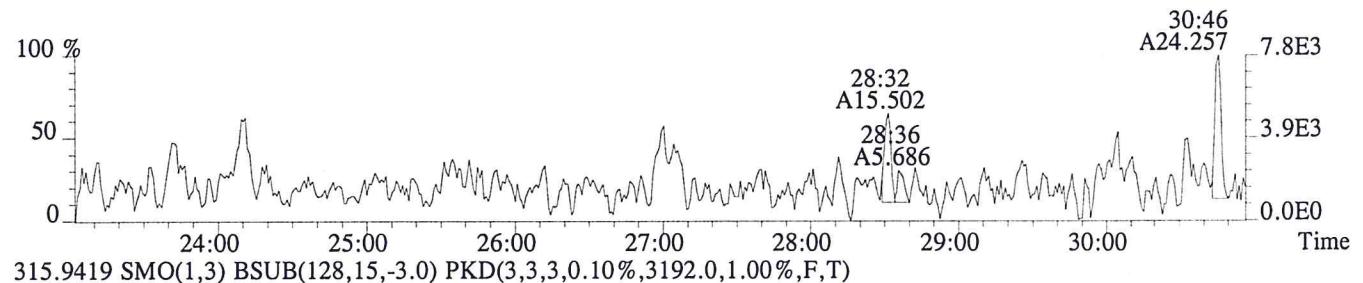
---

ALS ENVIRONMENTAL  
10450 Stancliff Rd., Suite 115  
Houston, TX 77099  
Office (281) 530-5656. Fax (281) 530-5887

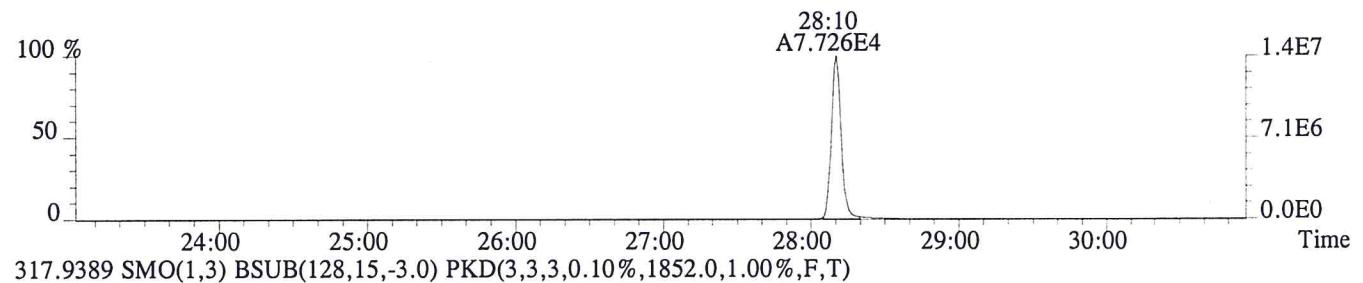
File:P600919 #1-562 Acq:12-OCT-2015 18:46:02 Probe EI + Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:E1500973-001  
 303.9016 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,952.0,1.00%,F,T)



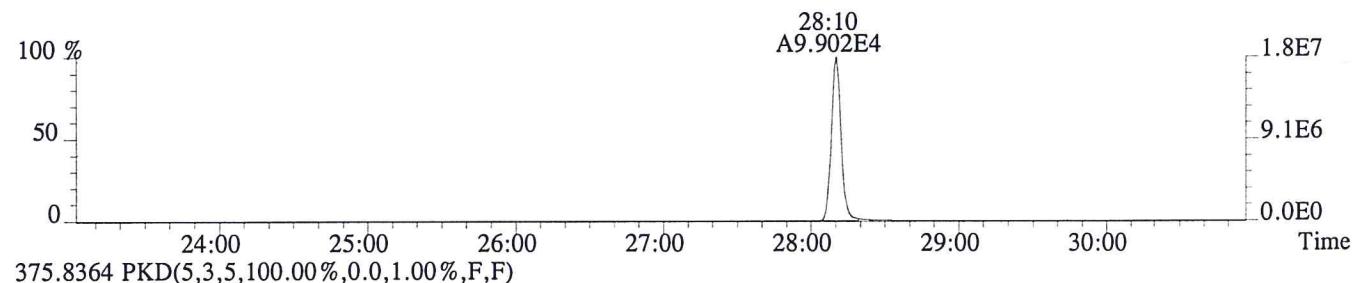
305.8987 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1936.0,1.00%,F,T)



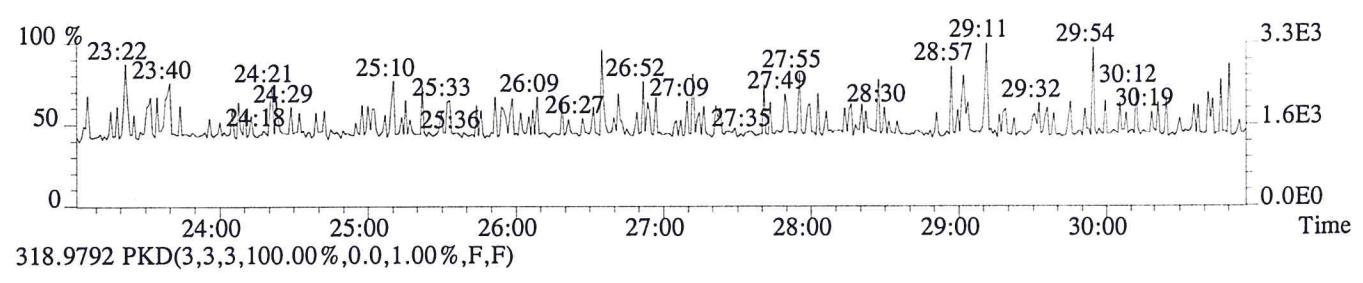
315.9419 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,3192.0,1.00%,F,T)



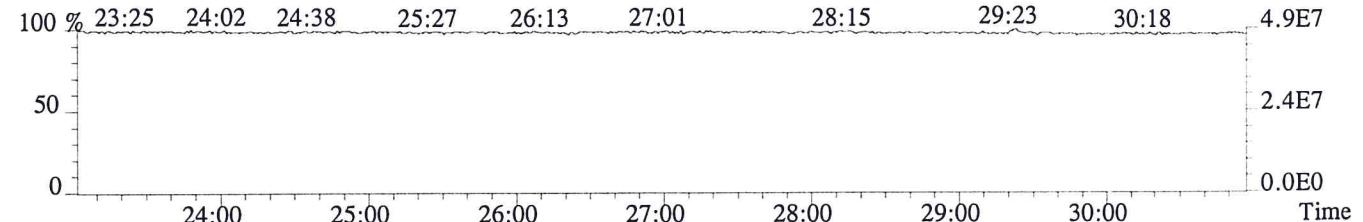
317.9389 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1852.0,1.00%,F,T)



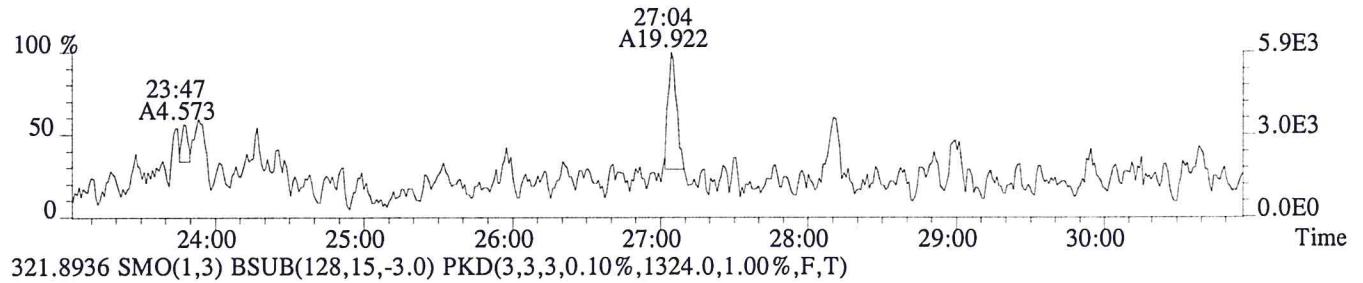
375.8364 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



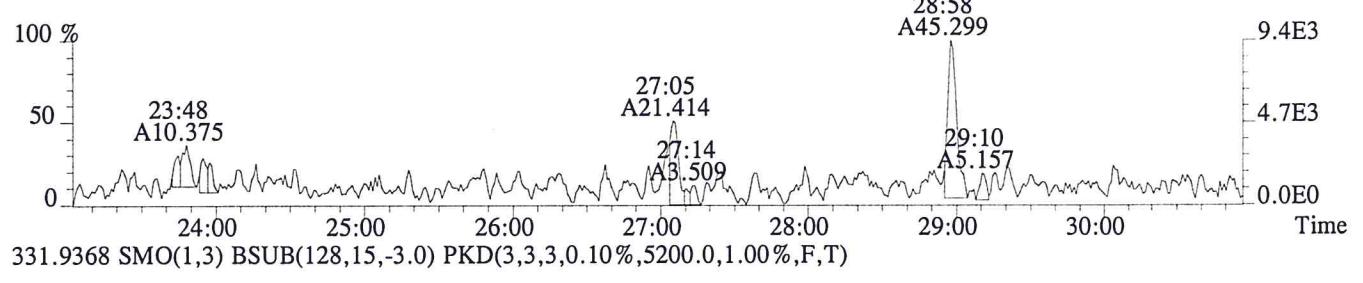
318.9792 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



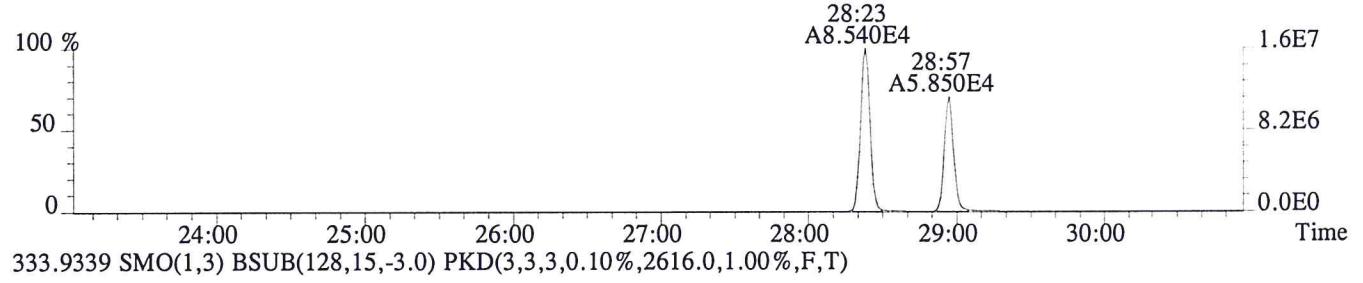
File:P600919 #1-562 Acq:12-OCT-2015 18:46:02 Probe EI + Magnet SIR VG BioTech Mass spectrf  
 Sample#1 Exp:E1500973-001  
 319.8965 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1756.0,1.00%,F,T)



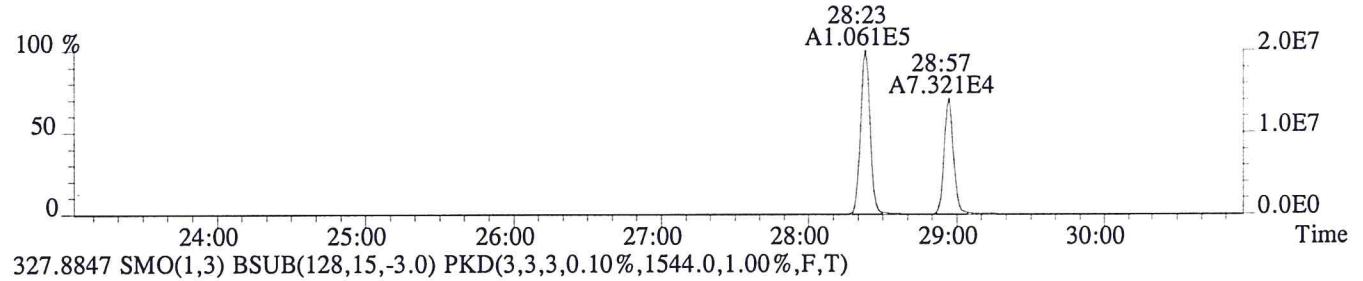
321.8936 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1324.0,1.00%,F,T)



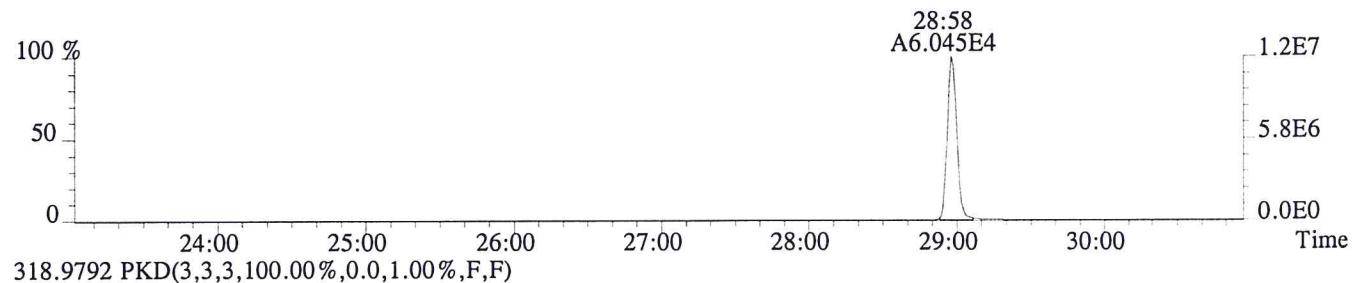
331.9368 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,5200.0,1.00%,F,T)



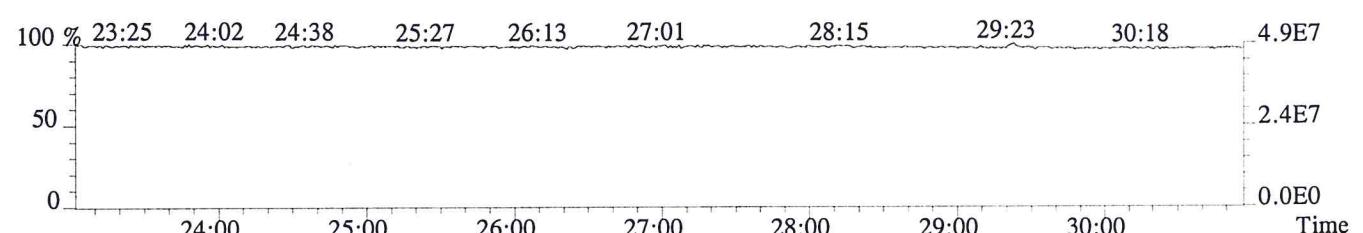
333.9339 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,2616.0,1.00%,F,T)



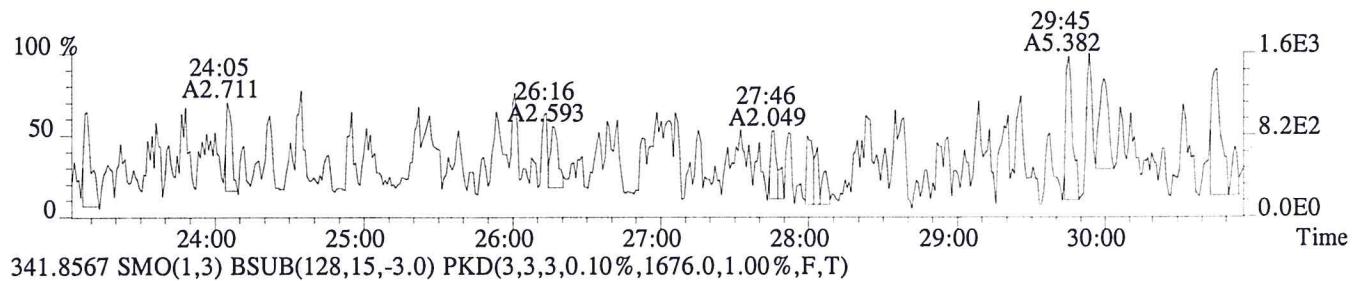
327.8847 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1544.0,1.00%,F,T)



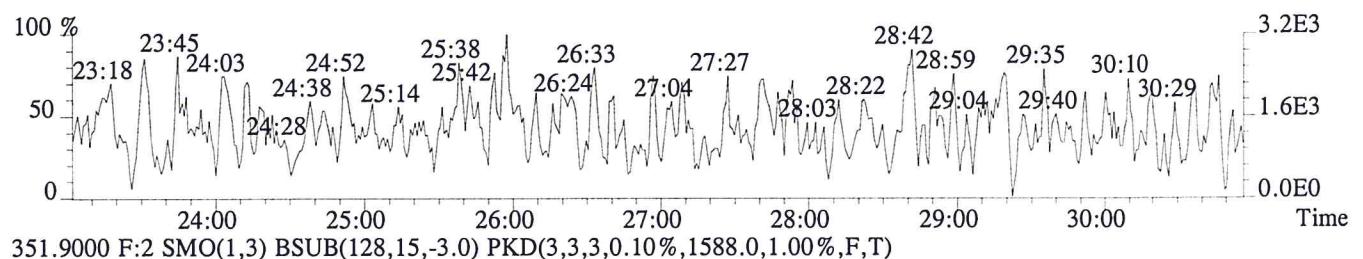
318.9792 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



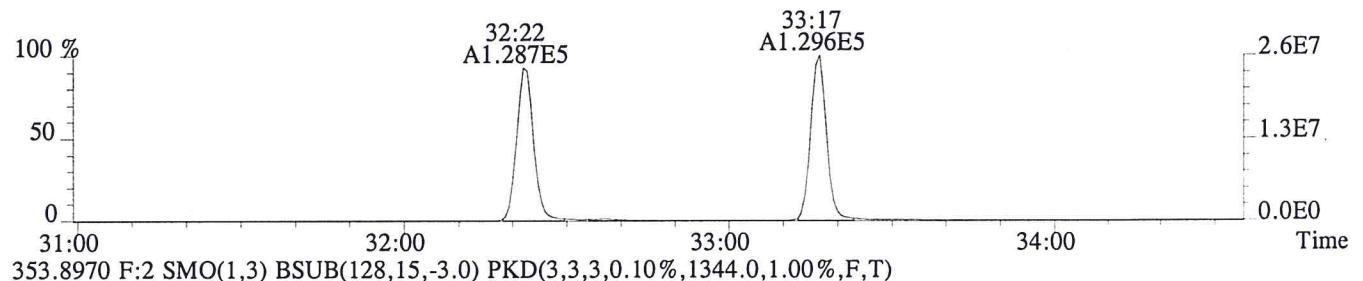
File:P600919 #1-562 Acq:12-OCT-2015 18:46:02 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:E1500973-001  
 339.8597 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,616.0,1.00%,F,T)



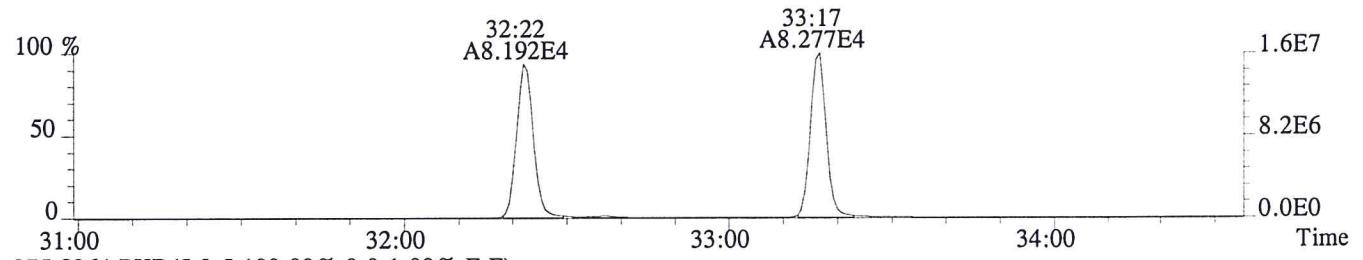
341.8567 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1676.0,1.00%,F,T)



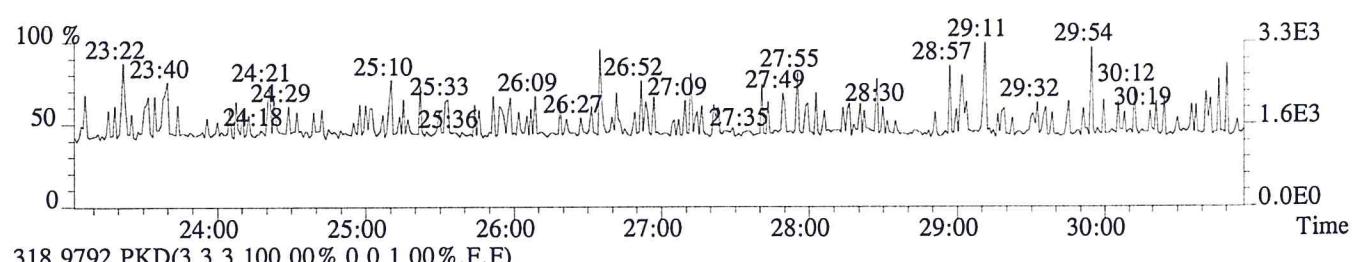
351.9000 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1588.0,1.00%,F,T)



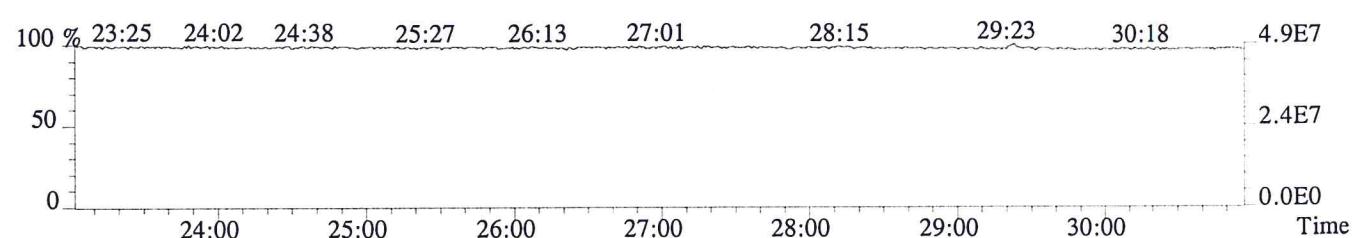
353.8970 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1344.0,1.00%,F,T)



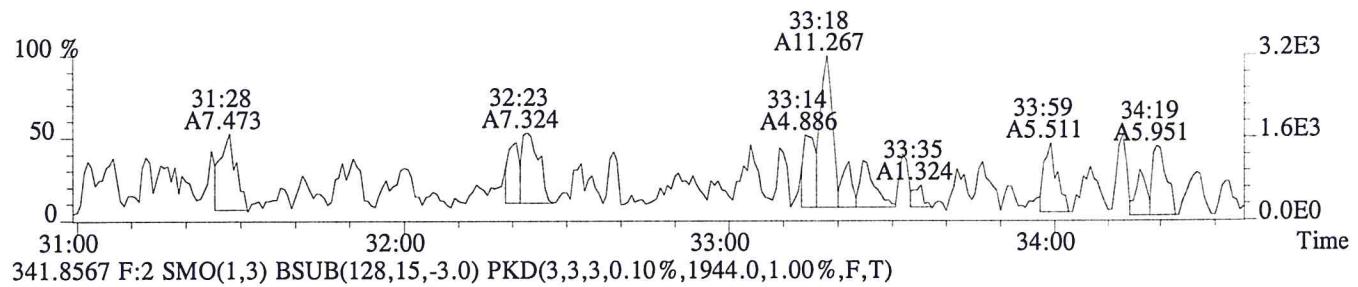
375.8364 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



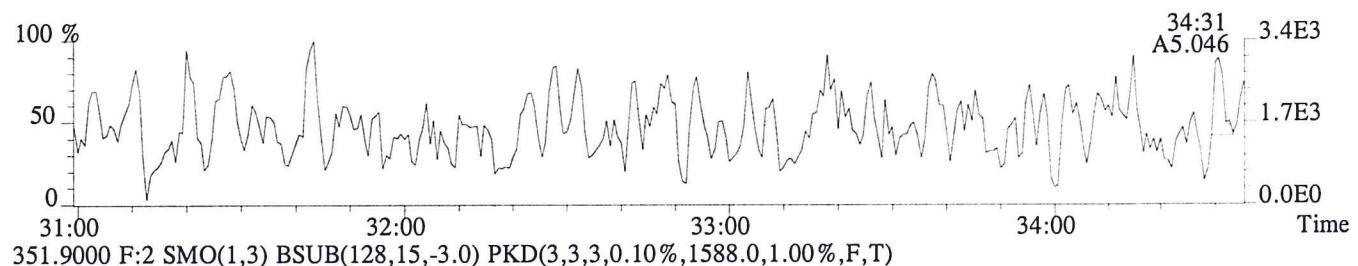
318.9792 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



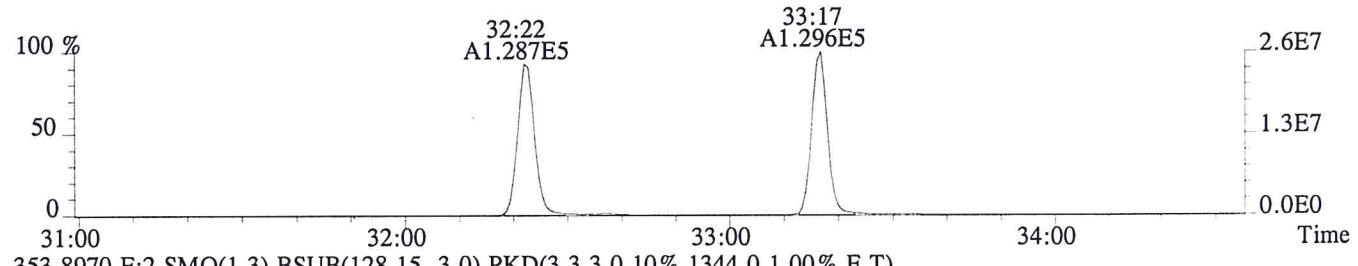
File:P600919 #1-325 Acq:12-OCT-2015 18:46:02 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:E1500973-001  
 339.8597 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,648.0,1.00%,F,T)



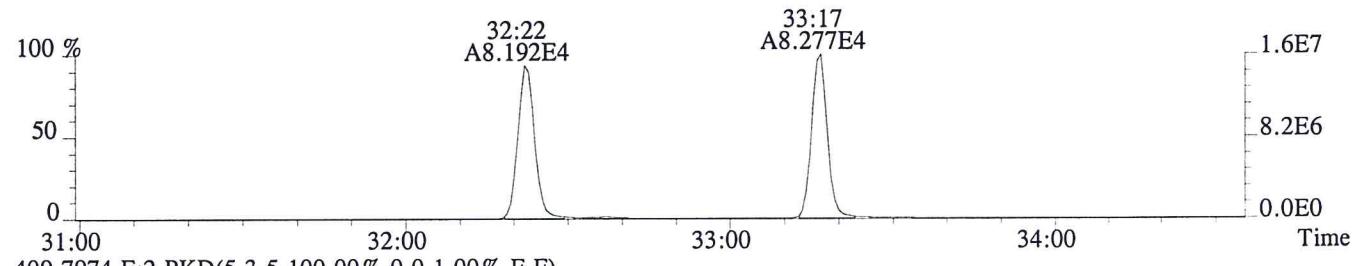
341.8567 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1944.0,1.00%,F,T)



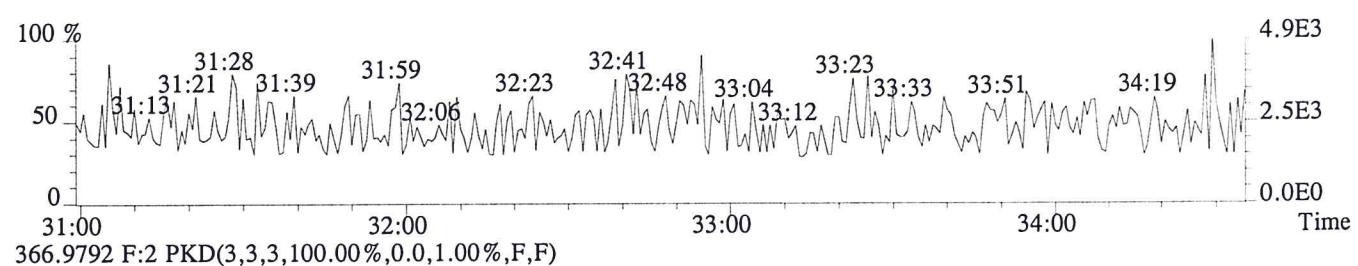
351.9000 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1588.0,1.00%,F,T)



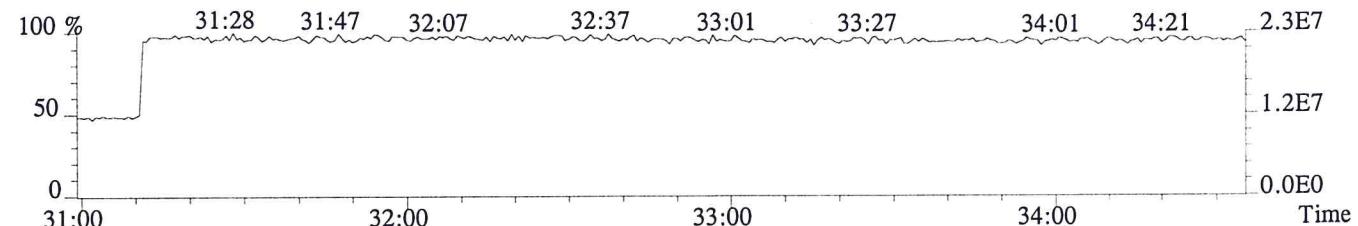
353.8970 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1344.0,1.00%,F,T)



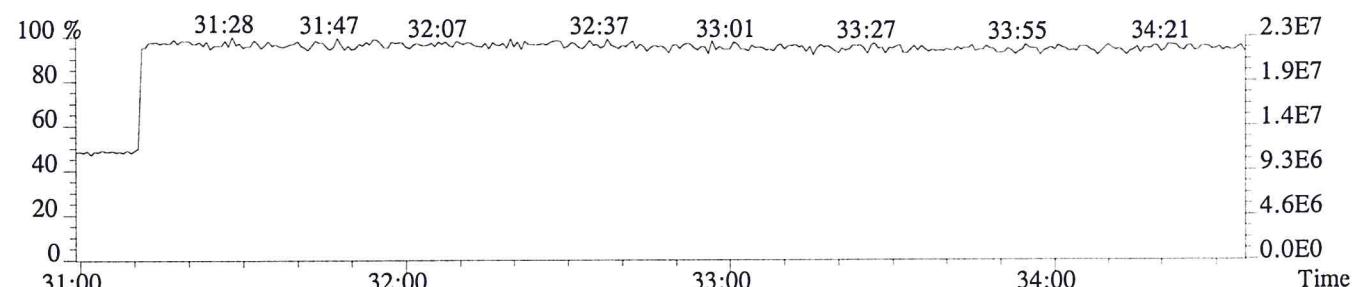
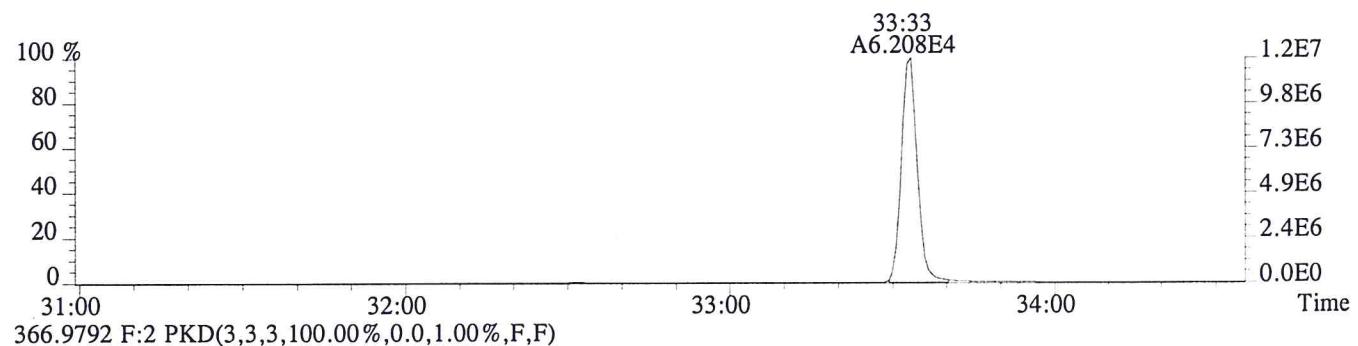
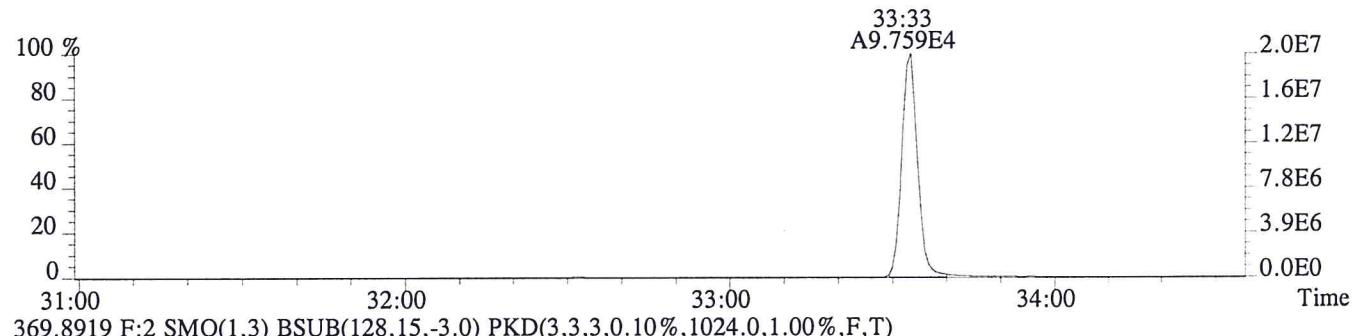
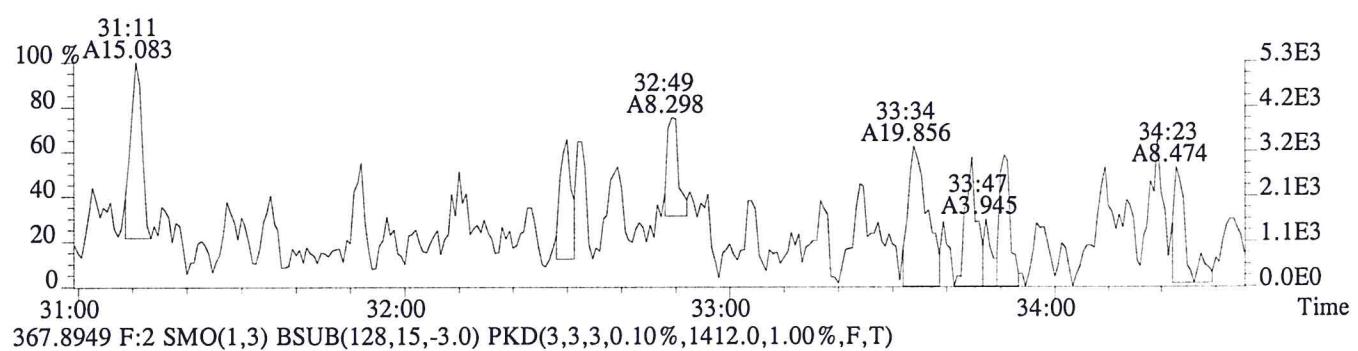
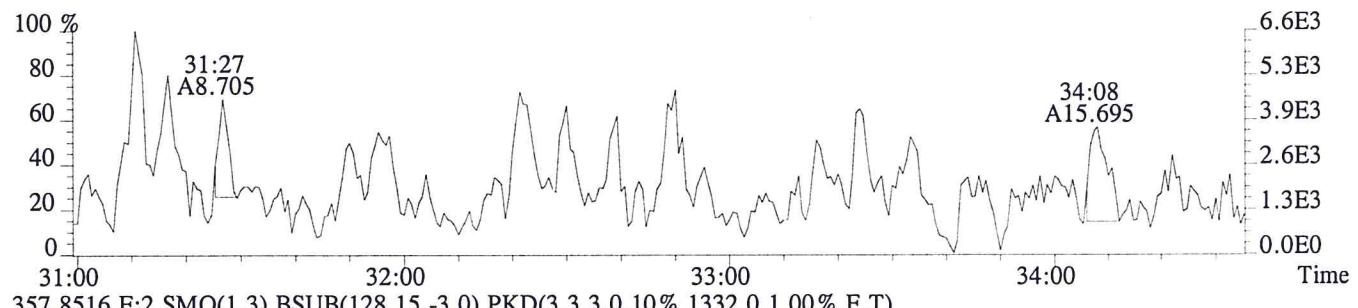
409.7974 F:2 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



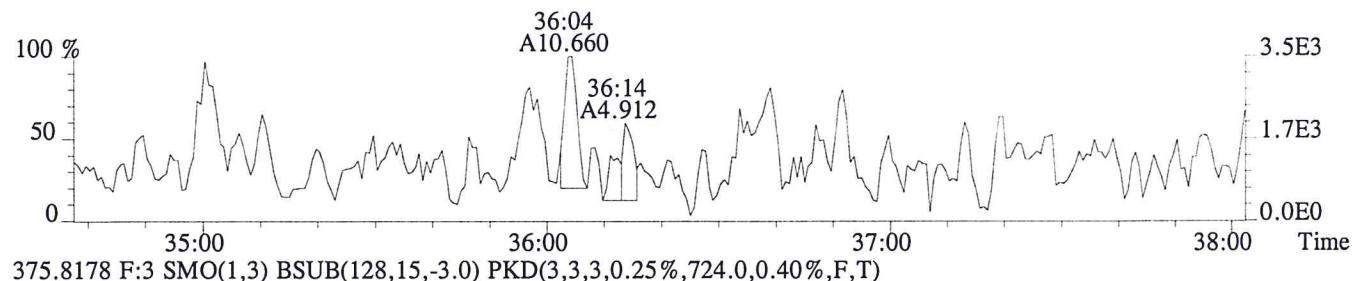
366.9792 F:2 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



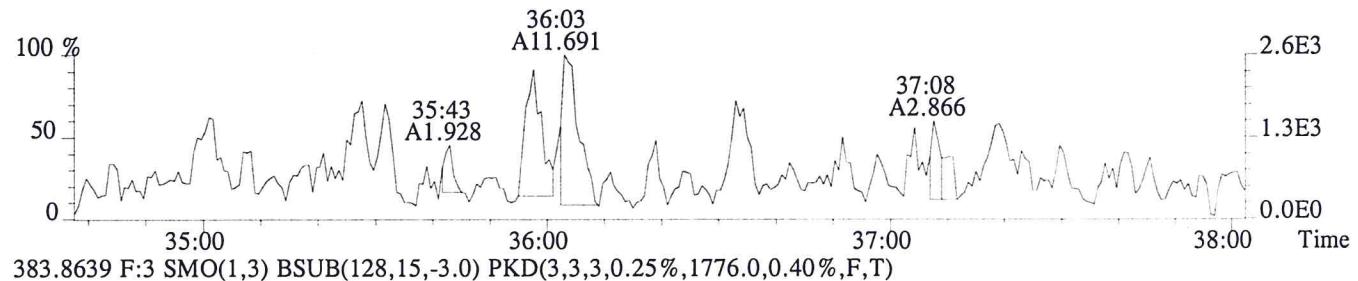
File:P600919 #1-325 Acq:12-OCT-2015 18:46:02 Probe EI+ Magnet SIR VG BioTech Mass spect<sup>f</sup>  
 Sample#1 Exp:E1500973-001  
 355.8546 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,2060.0,1.00%,F,T)



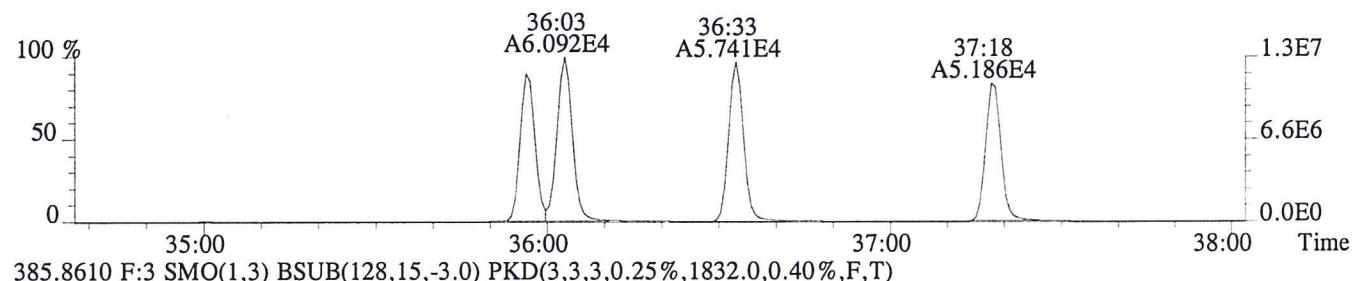
File:P600919 #1-308 Acq:12-OCT-2015 18:46:02 Probe EI+ Magnet SIR VG BioTech Mass spect&  
 Sample#1 Exp:E1500973-001  
 373.8208 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1496.0,0.40%,F,T)



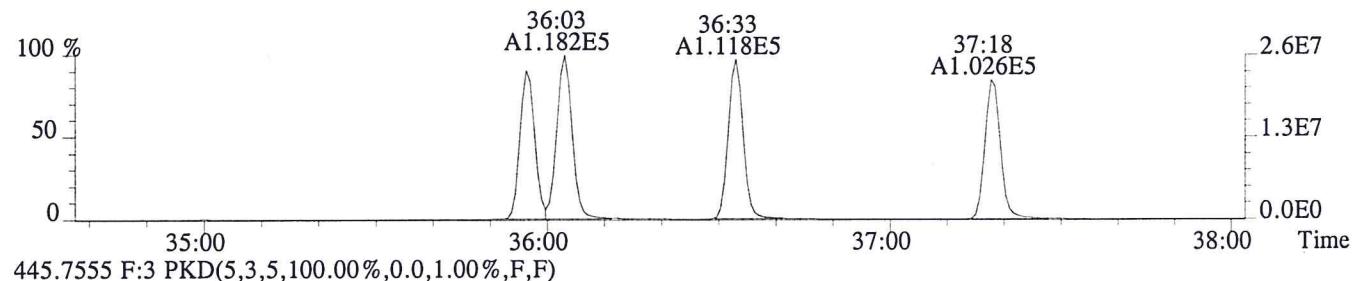
375.8178 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,724.0,0.40%,F,T)



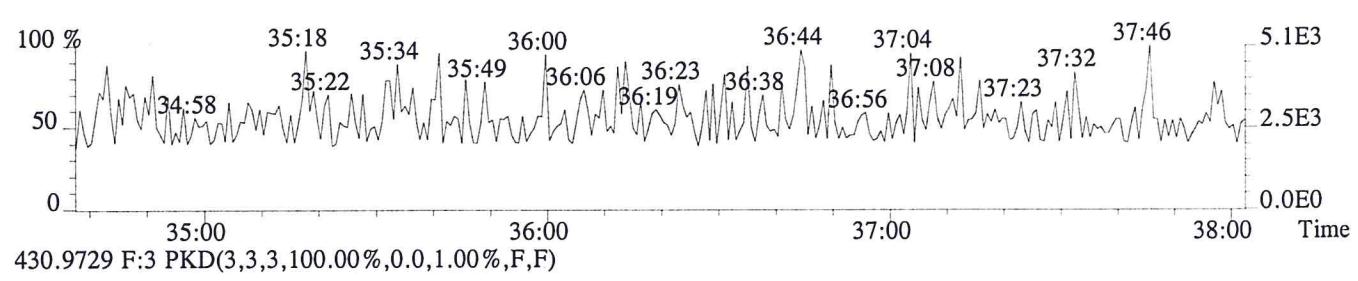
383.8639 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1776.0,0.40%,F,T)



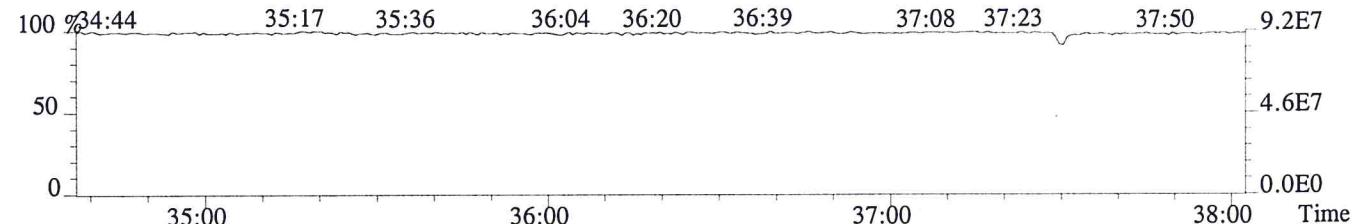
385.8610 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1832.0,0.40%,F,T)



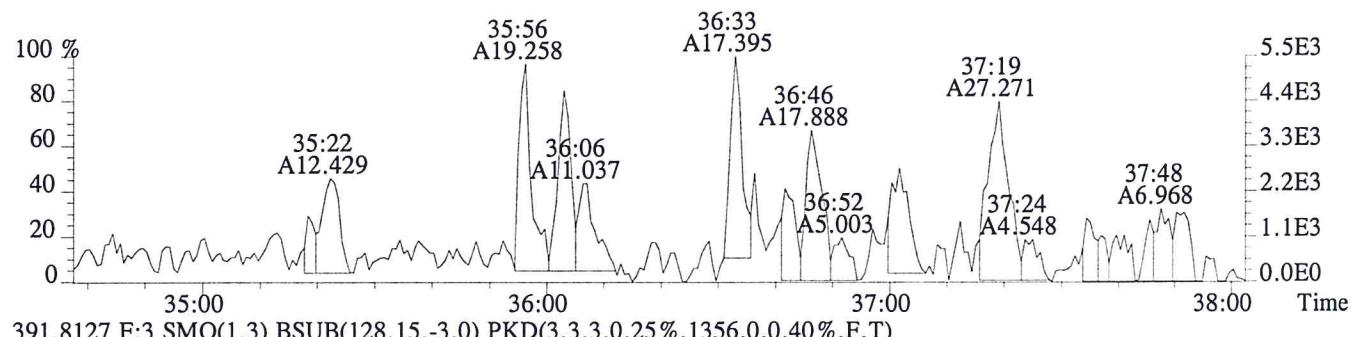
445.7555 F:3 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



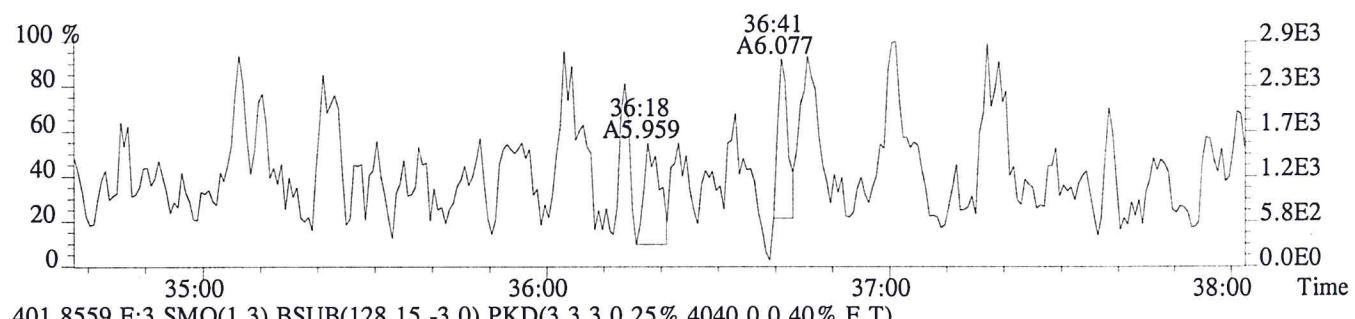
430.9729 F:3 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



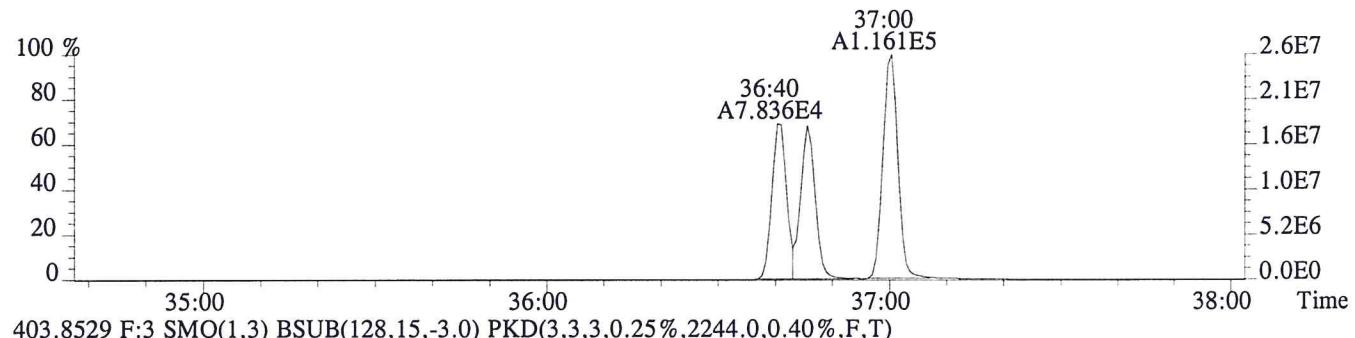
File:P600919 #1-308 Acq:12-OCT-2015 18:46:02 Probe EI+ Magnet SIR VG BioTech Mass spect&  
 Sample#1 Exp:E1500973-001  
 389.8157 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,852.0,0.40%,F,T)



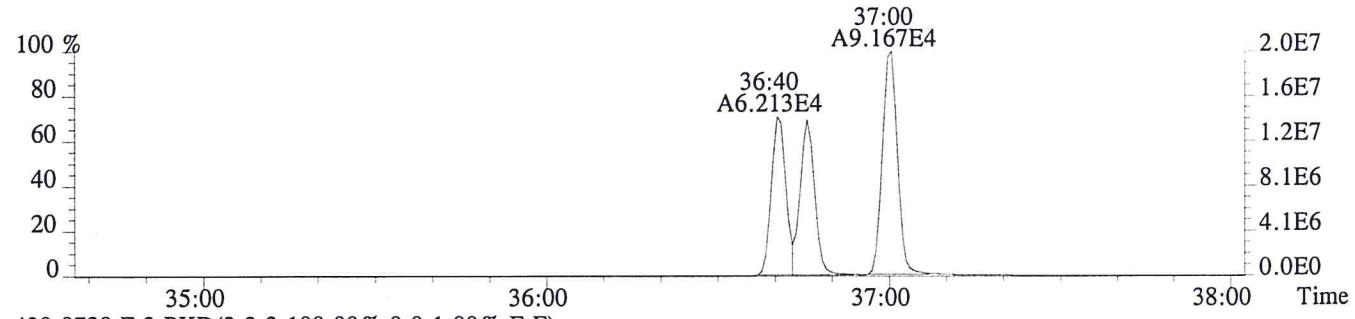
391.8127 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1356.0,0.40%,F,T)



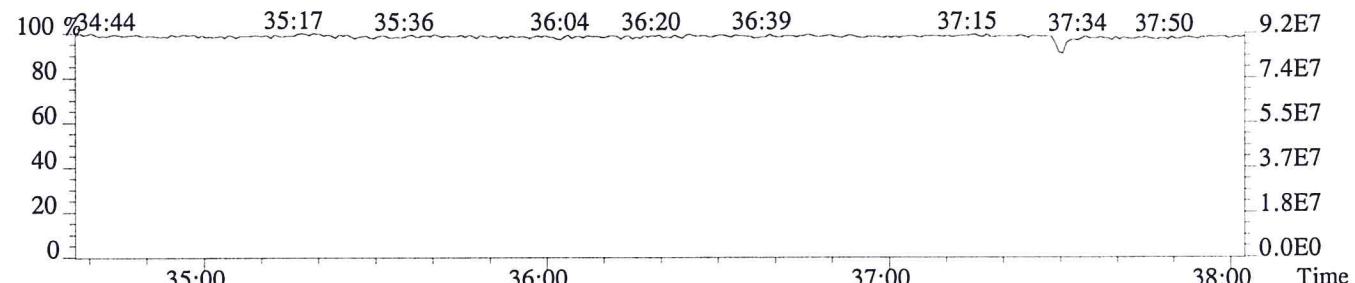
401.8559 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,4040.0,0.40%,F,T)



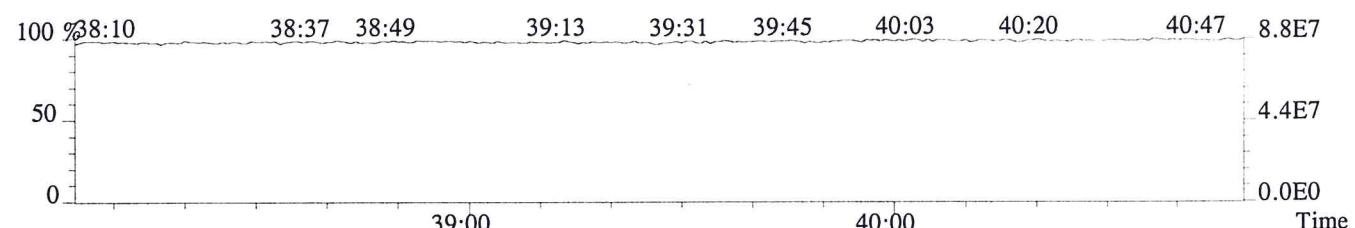
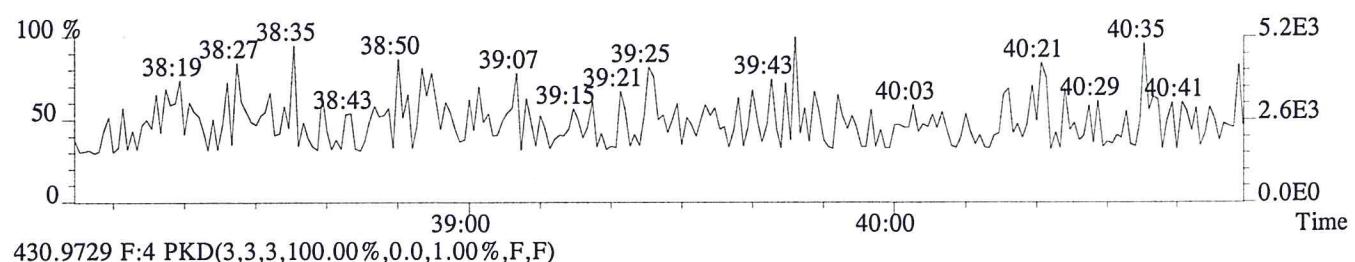
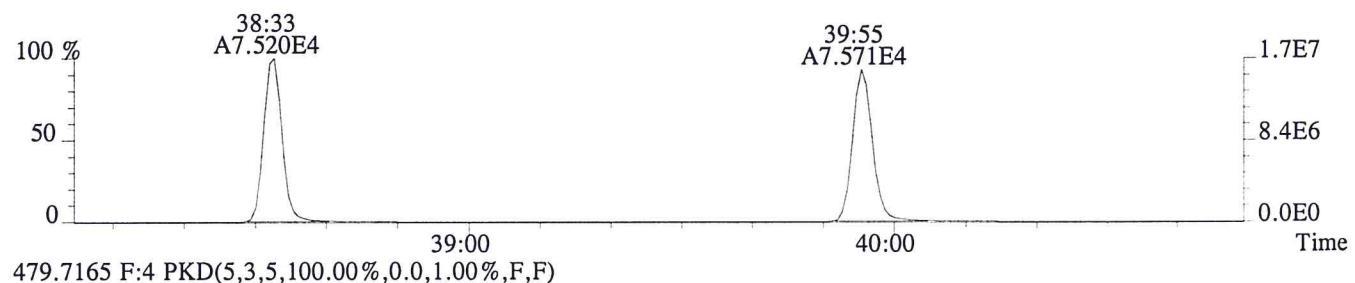
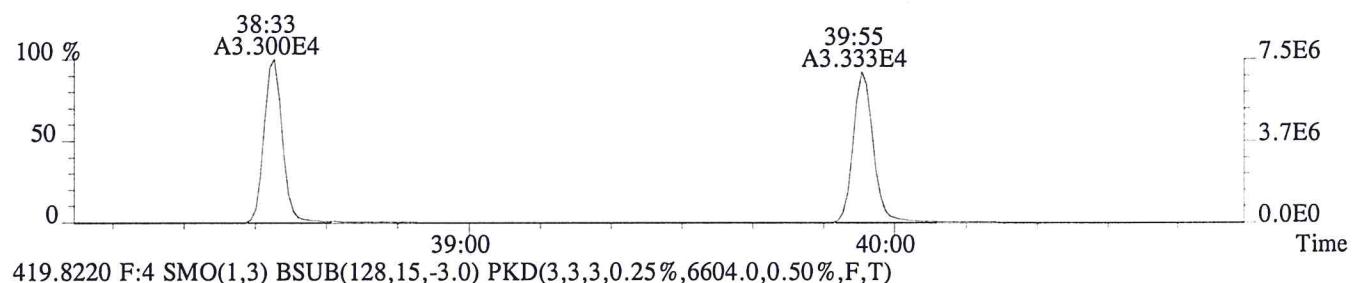
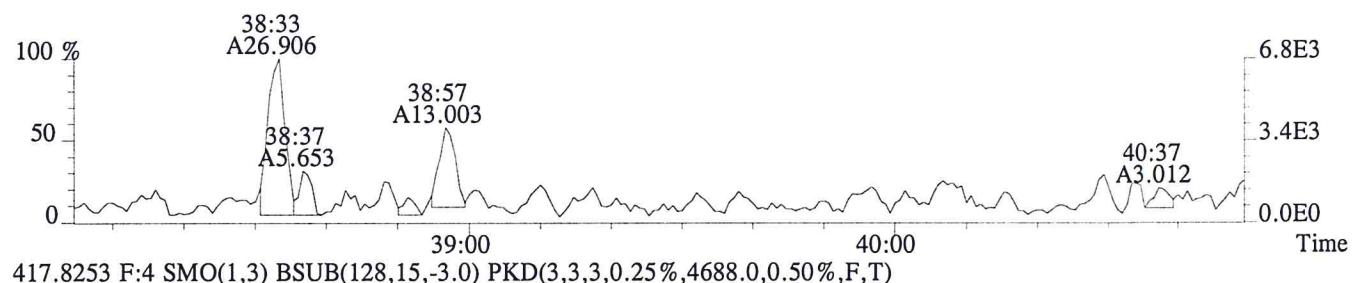
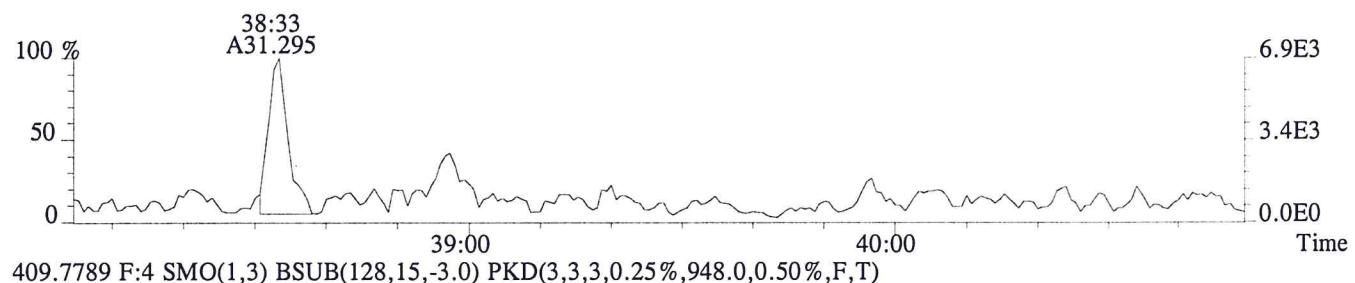
403.8529 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,2244.0,0.40%,F,T)



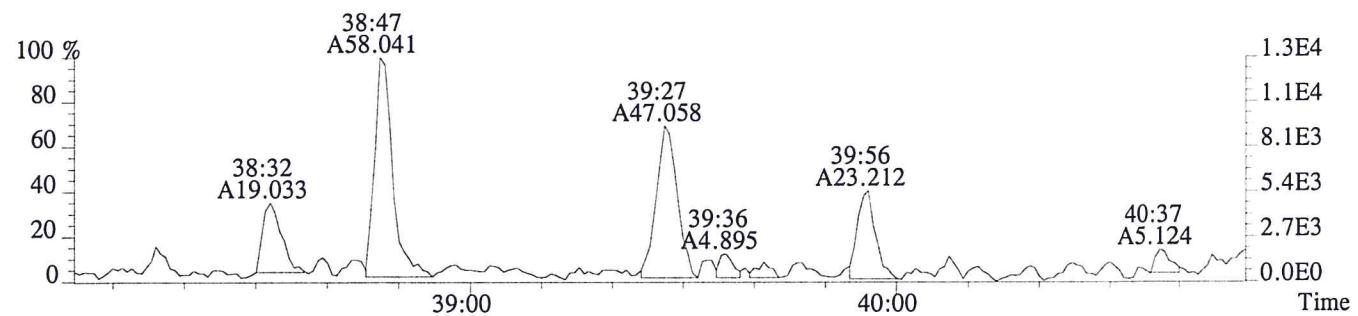
430.9729 F:3 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



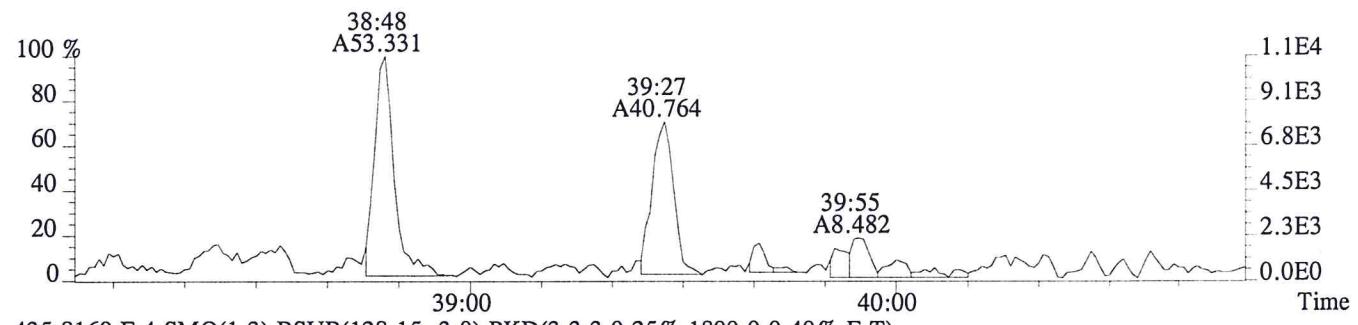
File:P600919 #1-248 Acq:12-OCT-2015 18:46:02 Probe EI+ Magnet SIR VG BioTech Mass spect<br/>Sample#1 Exp:E1500973-001  
407.7818 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1024.0,0.50%,F,T)



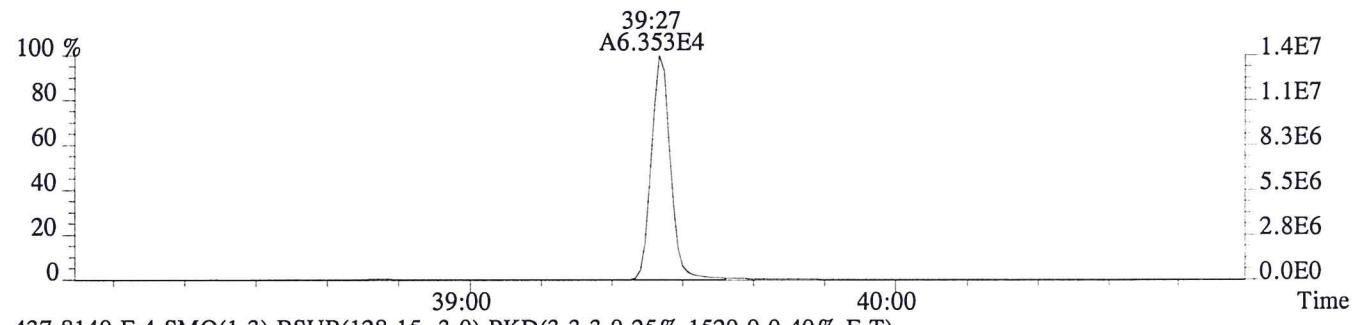
File:P600919 #1-248 Acq:12-OCT-2015 18:46:02 Probe EI+ Magnet SIR VG BioTech Mass spect&  
 Sample#1 Exp:E1500973-001  
 423.7766 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,784.0,0.40%,F,T)



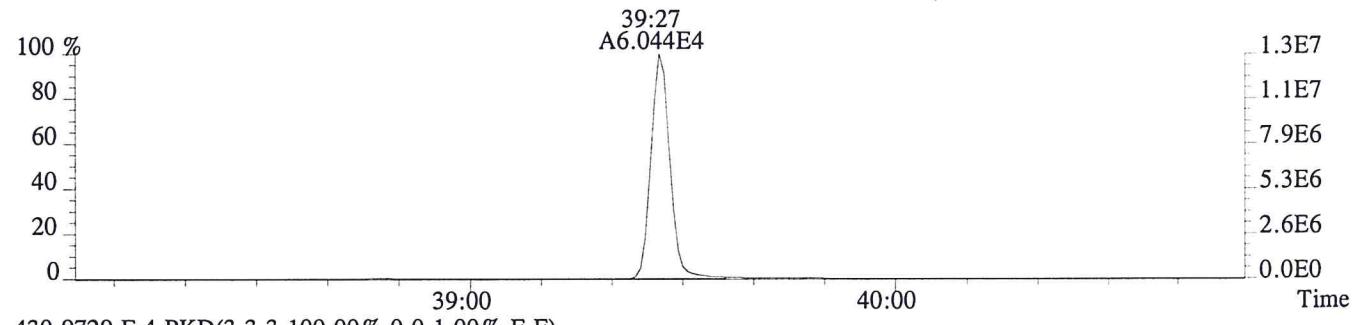
425.7737 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,736.0,0.40%,F,T)



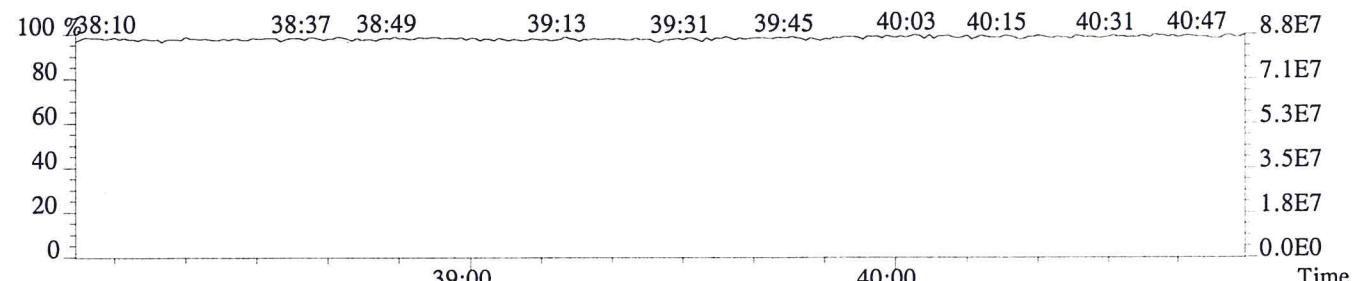
435.8169 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1800.0,0.40%,F,T)



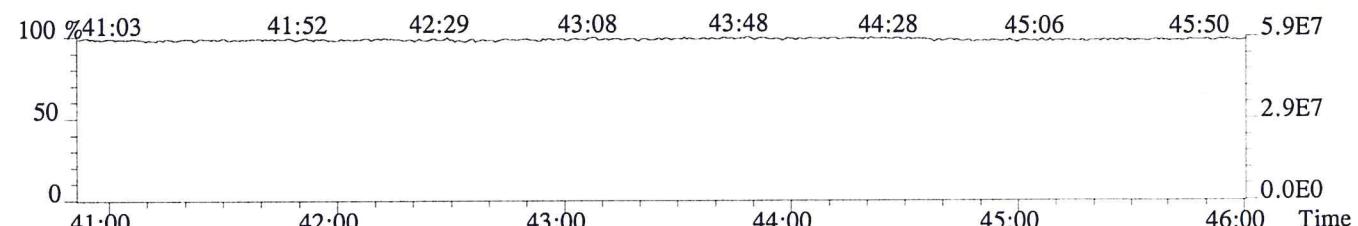
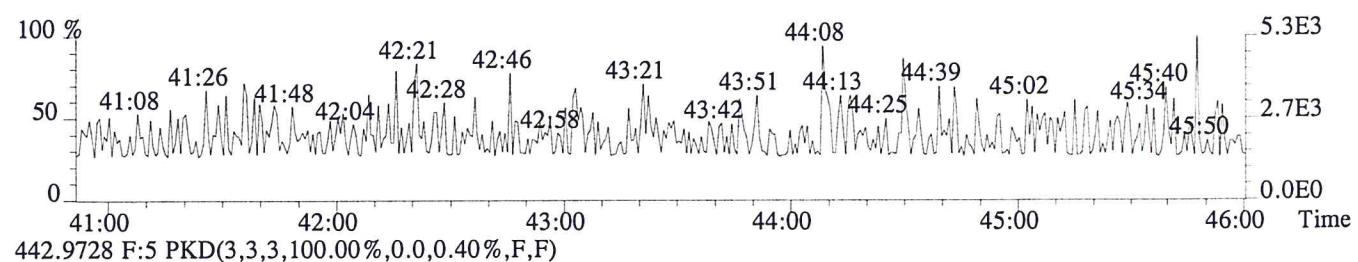
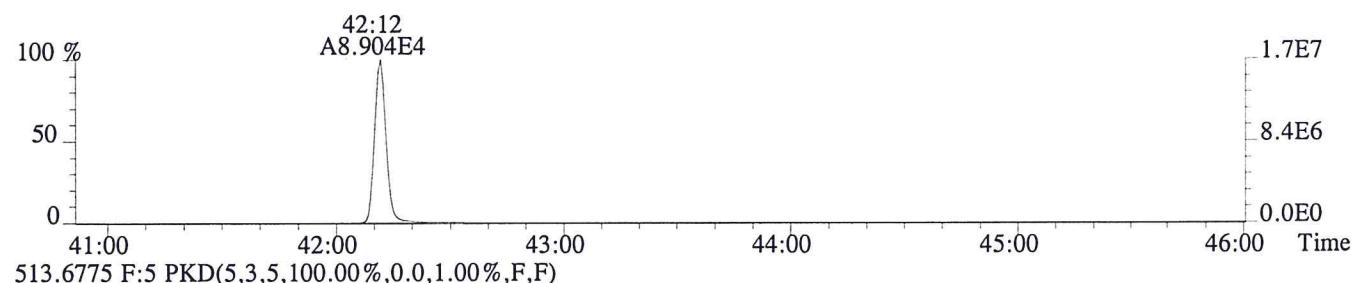
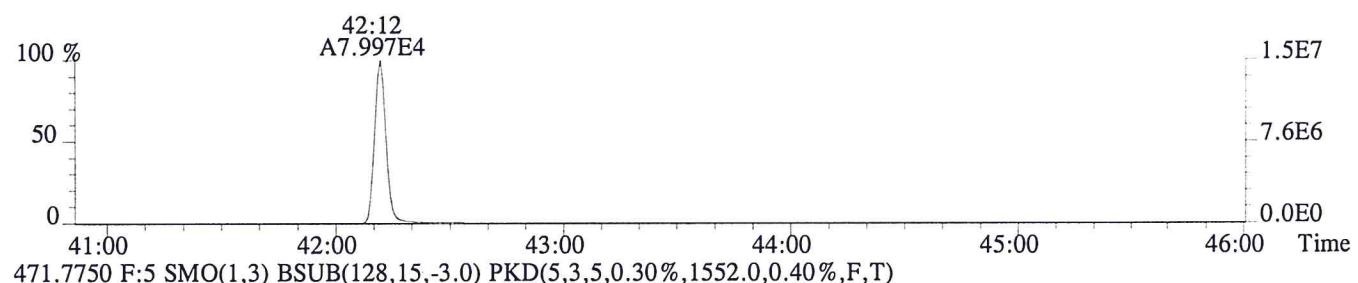
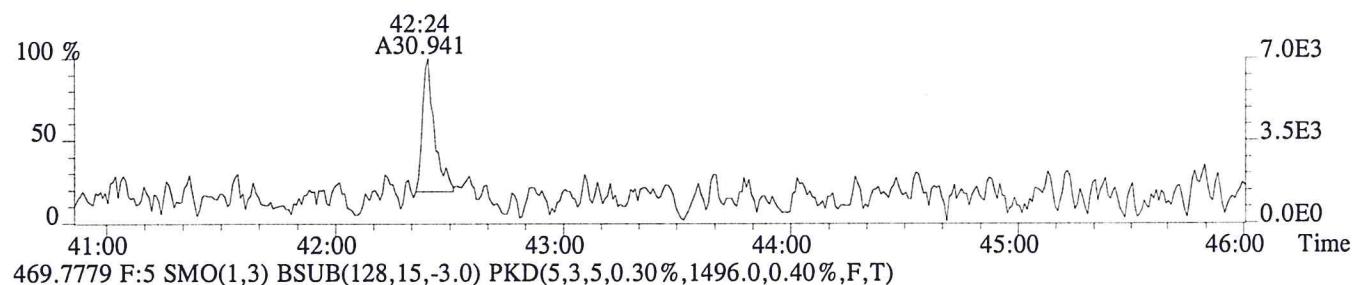
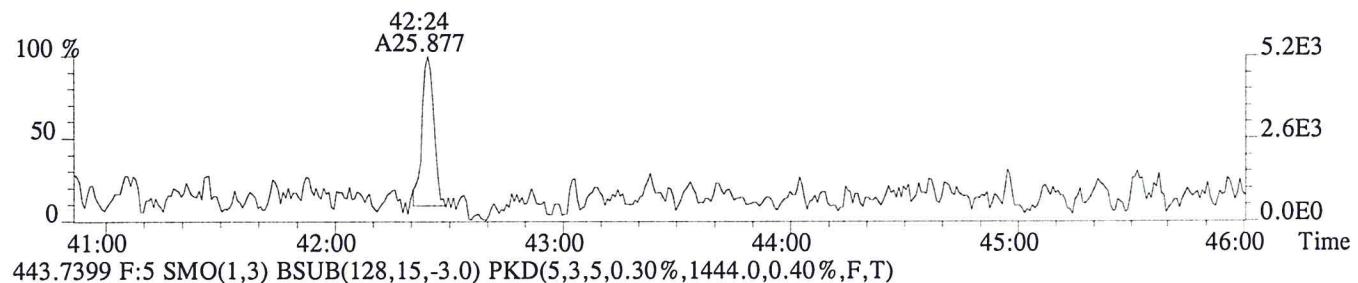
437.8140 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1520.0,0.40%,F,T)



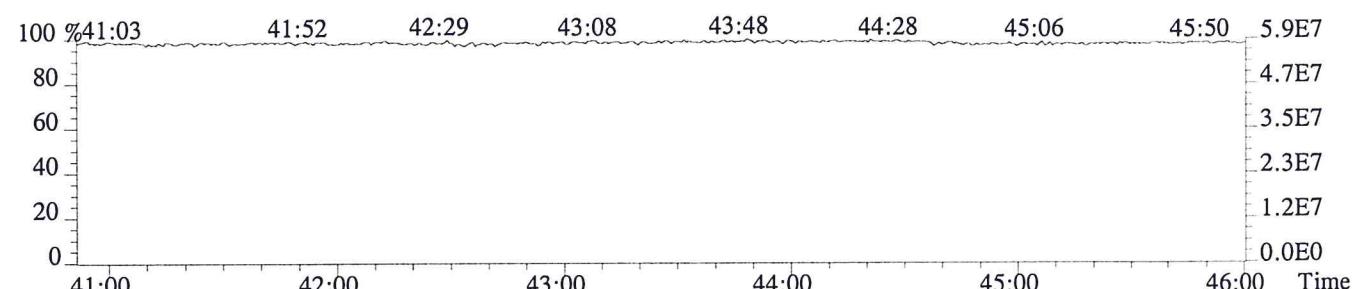
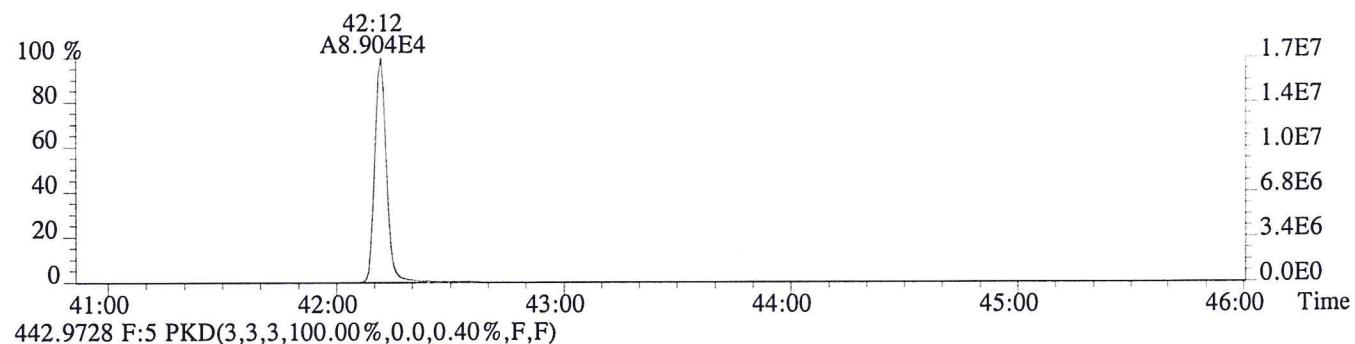
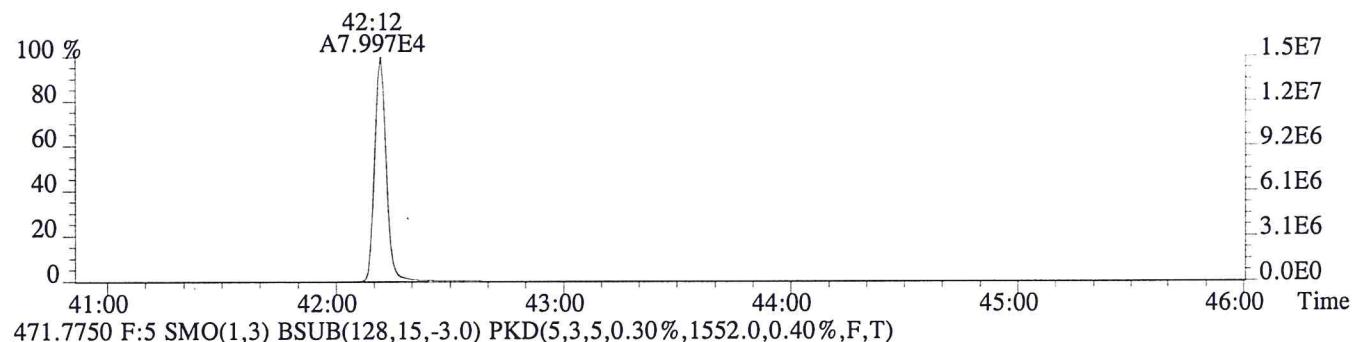
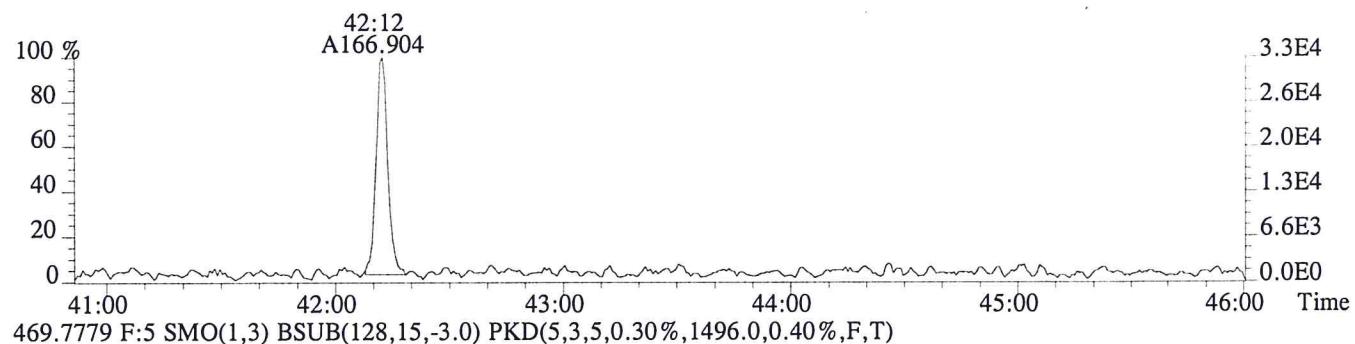
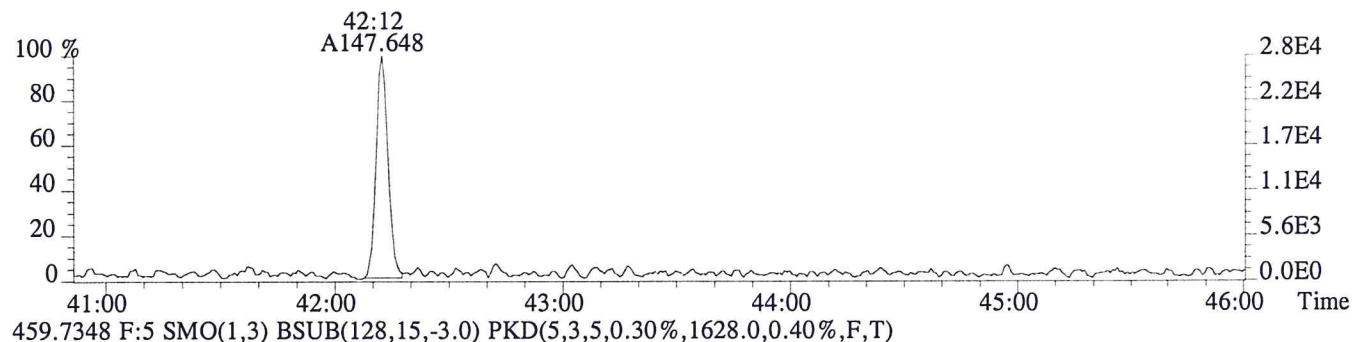
430.9729 F:4 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



File:P600919 #1-464 Acq:12-OCT-2015 18:46:02 Probe EI+ Magnet SIR VG BioTech Mass spect<br/>Sample#1 Exp:E1500973-001  
441.7428 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,964.0,0.40%,F,T)



File:P600919 #1-464 Acq:12-OCT-2015 18:46:02 Probe EI+ Magnet SIR VG BioTech Mass spectr  
 Sample#1 Exp:E1500973-001  
 457.7377 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1168.0,0.40%,F,T)



ALS ENVIRONMENTAL  
Sample Response Summary

CLIENT ID.  
METHOD BLANK

Run #9      Filename P600942      Samp: 1      Inj: 1      Acquired: 13-OCT-15 16:12:14  
Processed: 22-OCT-15 08:56:17      Sample ID: EQ1500602-01

Typ	Name	RT-1	Resp 1	Resp 2	Ratio	Meet	Mod?	RRF
1 Unk	2,3,7,8-TCDF	NotFnd	*	*	*	no	no	0.941
2 Unk	1,2,3,7,8-PeCDF	NotFnd	*	*	*	no	no	0.987
3 Unk	2,3,4,7,8-PeCDF	NotFnd	*	*	*	no	no	0.934
4 Unk	1,2,3,4,7,8-HxCDF	NotFnd	*	*	*	no	yes	1.189
5 Unk	1,2,3,6,7,8-HxCDF	NotFnd	*	*	*	no	yes	1.126
6 Unk	2,3,4,6,7,8-HxCDF	NotFnd	*	*	*	no	yes	1.116
7 Unk	1,2,3,7,8,9-HxCDF	NotFnd	*	*	*	no	no	1.158
8 Unk	1,2,3,4,6,7,8-HpCDF	NotFnd	*	*	*	no	yes	1.373
9 Unk	1,2,3,4,7,8,9-HpCDF	NotFnd	*	*	*	no	yes	1.287
10 Unk	OCDF	NotFnd	*	*	*	no	no	1.257
11 Unk	2,3,7,8-TCDD	NotFnd	*	*	*	no	no	1.010
12 Unk	1,2,3,7,8-PeCDD	NotFnd	*	*	*	no	no	0.932
13 Unk	1,2,3,4,7,8-HxCDD	NotFnd	*	*	*	no	no	1.026
14 Unk	1,2,3,6,7,8-HxCDD	NotFnd	*	*	*	no	no	1.021
15 Unk	1,2,3,7,8,9-HxCDD	NotFnd	*	*	*	no	no	1.133
16 Unk	1,2,3,4,6,7,8-HpCDD	NotFnd	*	*	*	no	yes	1.034
17 Unk	OCDD	42:12	3.783e+01	4.370e+01	0.87	yes	no	1.111
18 IS	13C-2,3,7,8-TCDF	28:09	6.739e+04	8.607e+04	0.78	yes	no	1.379
19 IS	13C-1,2,3,7,8-PeCDF	32:21	1.097e+05	7.007e+04	1.57	yes	no	1.456
20 IS	13C-2,3,4,7,8-PeCDF	33:15	1.092e+05	7.024e+04	1.56	yes	no	1.465
21 IS	13C-1,2,3,4,7,8-HxCDF	35:56	4.474e+04	8.742e+04	0.51	yes	no	1.075
22 IS	13C-1,2,3,6,7,8-HxCDF	36:02	5.224e+04	1.015e+05	0.51	yes	no	1.158
23 IS	13C-2,3,4,6,7,8-HxCDF	36:32	4.980e+04	9.700e+04	0.51	yes	no	1.133
24 IS	13C-1,2,3,7,8,9-HxCDF	37:17	4.400e+04	8.528e+04	0.52	yes	no	1.024
25 IS	13C-1,2,3,4,6,7,8-HpCDF	38:32	2.944e+04	6.770e+04	0.43	yes	no	0.880
26 IS	13C-1,2,3,4,7,8,9-HpCDF	39:55	2.844e+04	6.427e+04	0.44	yes	no	0.914
27 IS	13C-2,3,7,8-TCDD	28:55	5.097e+04	6.400e+04	0.80	yes	no	1.193
28 IS	13C-1,2,3,7,8-PeCDD	33:32	8.271e+04	5.217e+04	1.59	yes	no	1.094
29 IS	13C-1,2,3,4,7,8-HxCDD	36:40	6.795e+04	5.388e+04	1.26	yes	no	0.906
30 IS	13C-1,2,3,6,7,8-HxCDD	36:45	6.945e+04	5.499e+04	1.26	yes	no	0.860
31 IS	13C-1,2,3,4,6,7,8-HpCDD	39:26	5.426e+04	5.092e+04	1.07	yes	no	0.892
32 IS	13C-OCDD	42:11	6.650e+04	7.431e+04	0.89	yes	no	0.642
33 RS/RT	13C-1,2,3,4-TCDD	28:21	7.143e+04	8.843e+04	0.81	yes	no	-
34 RS/RT	13C-1,2,3,7,8,9-HxCDD	37:00	9.238e+04	7.348e+04	1.26	yes	no	-
35 C/Up	37Cl-2,3,7,8-TCDD	28:57	5.388e+04				no	1.263

$$(3.783e+01 + 4.370e+01) \times 4000 \text{ pg} \times 1$$

$$\text{OCDD} = \frac{(6.650e+04 + 7.431e+04) \times \text{g}}{\text{x}} / 100 \times 1.111$$

ALS ENVIRONMENTAL -- HOUSTON HRMS  
10450 Stancliff Rd., Suite 115  
Houston, TX 77099  
Telephone: (713) 266-1599. Fax (713) 266-0130

ALS ENVIRONMENTAL  
Signal/Noise Height Ratio Summary

CLIENT ID.  
METHOD BLANK

Run #9    Filename P600942              Samp: 1    Inj: 1           Acquired: 13-OCT-15 16:12:14  
Processed: 22-OCT-15 08:56:17              LAB. ID: EQ1500602-01

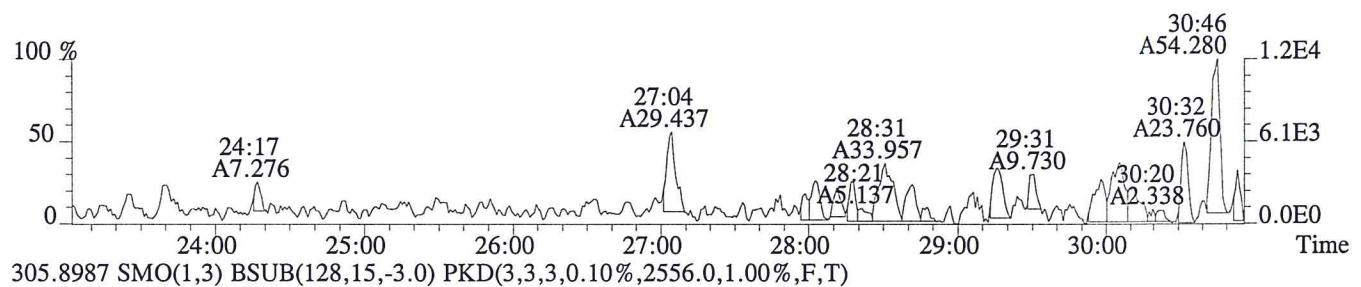
	Name	Signal 1	Noise 1	S/N Rat.1	Signal 2	Noise 2	S/N Rat.2
--	------	----------	---------	-----------	----------	---------	-----------

1	2,3,7,8-TCDF	*	1.18e+03	*	*	2.56e+03	*
2	1,2,3,7,8-PeCDF	*	7.00e+02	*	*	1.80e+03	*
3	2,3,4,7,8-PeCDF	*	7.00e+02	*	*	1.80e+03	*
4	1,2,3,4,7,8-HxCDF	*	1.10e+03	*	*	3.20e+02	*
5	1,2,3,6,7,8-HxCDF	*	1.10e+03	*	*	3.20e+02	*
6	2,3,4,6,7,8-HxCDF	*	1.10e+03	*	*	3.20e+02	*
7	1,2,3,7,8,9-HxCDF	*	1.10e+03	*	*	3.20e+02	*
8	1,2,3,4,6,7,8-HpCDF	*	9.68e+02	*	*	6.36e+02	*
9	1,2,3,4,7,8,9-HpCDF	*	9.68e+02	*	*	6.36e+02	*
10	OCDF	*	8.28e+02	*	*	1.29e+03	*
11	2,3,7,8-TCDD	*	1.84e+03	*	*	1.45e+03	*
12	1,2,3,7,8-PeCDD	*	3.65e+03	*	*	2.43e+03	*
13	1,2,3,4,7,8-HxCDD	*	1.34e+03	*	*	1.14e+03	*
14	1,2,3,6,7,8-HxCDD	*	1.34e+03	*	*	1.14e+03	*
15	1,2,3,7,8,9-HxCDD	*	1.34e+03	*	*	1.14e+03	*
16	1,2,3,4,6,7,8-HpCDD	*	1.65e+03	*	*	1.21e+03	*
17	OCDD	6.87e+03	8.04e+02	8.5e+00	7.34e+03	9.84e+02	7.5e+00
18	13C-2,3,7,8-TCDF	1.23e+07	2.68e+03	4.6e+03	1.57e+07	2.01e+03	7.8e+03
19	13C-1,2,3,7,8-PeCDF	2.09e+07	1.61e+03	1.3e+04	1.34e+07	1.57e+03	8.5e+03
20	13C-2,3,4,7,8-PeCDF	2.14e+07	1.61e+03	1.3e+04	1.38e+07	1.57e+03	8.8e+03
21	13C-1,2,3,4,7,8-HxCDF	1.00e+07	1.38e+03	7.2e+03	1.96e+07	2.30e+03	8.5e+03
22	13C-1,2,3,6,7,8-HxCDF	1.12e+07	1.38e+03	8.1e+03	2.17e+07	2.30e+03	9.4e+03
23	13C-2,3,4,6,7,8-HxCDF	1.11e+07	1.38e+03	8.0e+03	2.15e+07	2.30e+03	9.4e+03
24	13C-1,2,3,7,8,9-HxCDF	9.27e+06	1.38e+03	6.7e+03	1.82e+07	2.30e+03	7.9e+03
25	13C-1,2,3,4,6,7,8-HpCDF	6.47e+06	5.39e+03	1.2e+03	1.46e+07	3.85e+03	3.8e+03
26	13C-1,2,3,4,7,8,9-HpCDF	5.89e+06	5.39e+03	1.1e+03	1.32e+07	3.85e+03	3.4e+03
27	13C-2,3,7,8-TCDD	9.73e+06	4.76e+03	2.0e+03	1.22e+07	2.79e+03	4.4e+03
28	13C-1,2,3,7,8-PeCDD	1.62e+07	1.30e+03	1.2e+04	1.03e+07	7.80e+02	1.3e+04
29	13C-1,2,3,4,7,8-HxCDD	1.58e+07	3.26e+03	4.8e+03	1.26e+07	2.48e+03	5.1e+03
30	13C-1,2,3,6,7,8-HxCDD	1.49e+07	3.26e+03	4.6e+03	1.18e+07	2.48e+03	4.8e+03
31	13C-1,2,3,4,6,7,8-HpCDD	1.18e+07	1.65e+03	7.1e+03	1.10e+07	2.04e+03	5.4e+03
32	13C-OCDD	1.23e+07	1.91e+03	6.4e+03	1.36e+07	1.32e+03	1.0e+04
33	13C-1,2,3,4-TCDD	1.35e+07	4.76e+03	2.8e+03	1.69e+07	2.79e+03	6.0e+03
34	13C-1,2,3,7,8,9-HxCDD	2.00e+07	3.26e+03	6.1e+03	1.60e+07	2.48e+03	6.4e+03
35	37Cl-2,3,7,8-TCDD	1.04e+07	2.02e+03	5.2e+03			

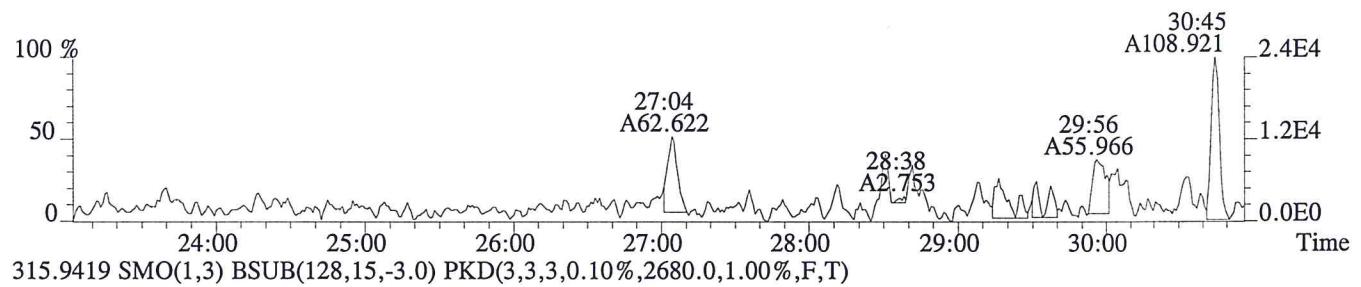
---

ALS ENVIRONMENTAL  
10450 Stancliff Rd., Suite 115  
Houston, TX 77099  
Office: (713) 266-1599. Fax: (713) 266-0130

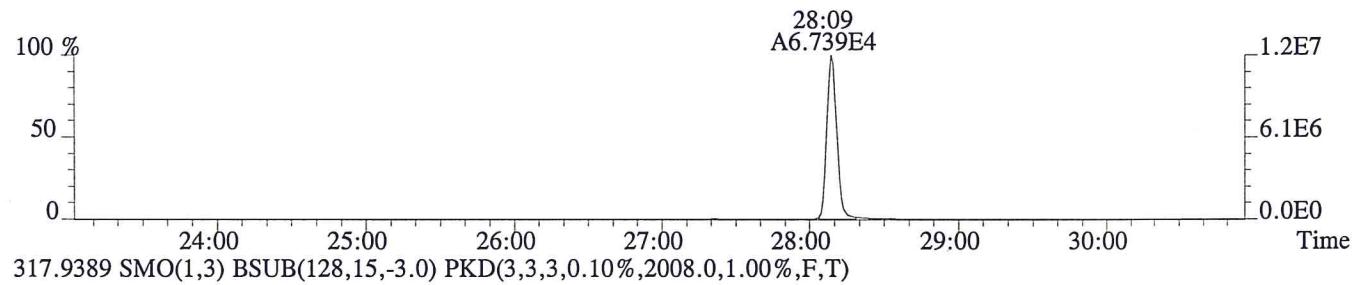
File:P600942 #1-562 Acq:13-OCT-2015 16:12:14 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:MB  
 303.9016 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1180.0,1.00%,F,T)



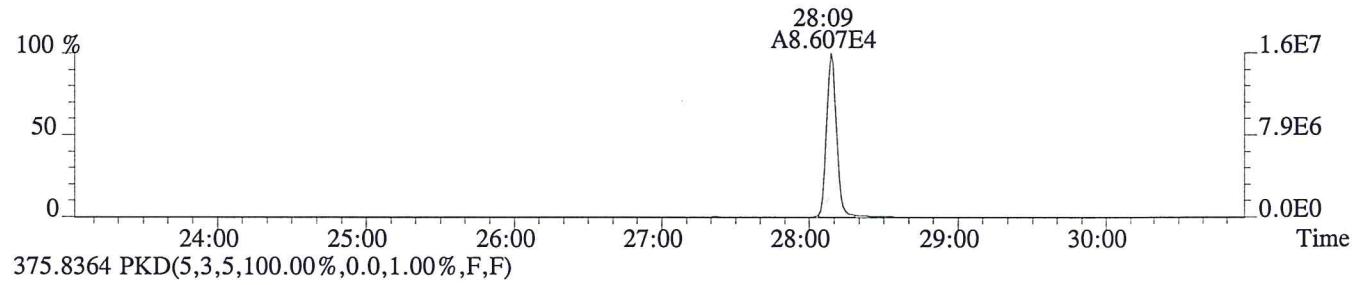
305.8987 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,2556.0,1.00%,F,T)



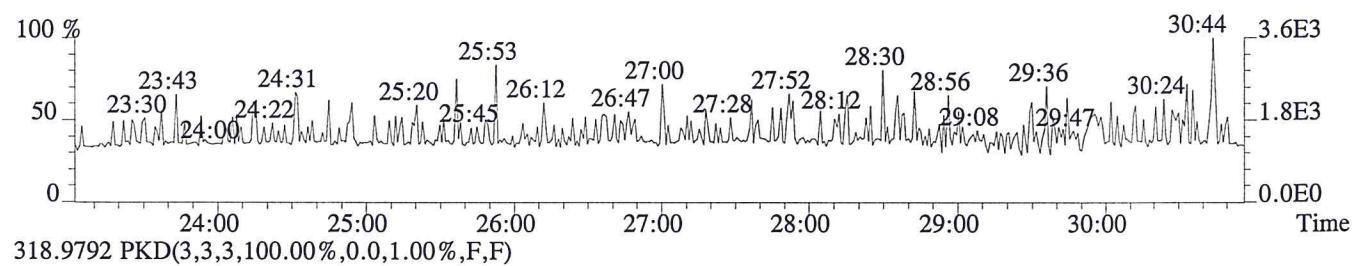
315.9419 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,2680.0,1.00%,F,T)



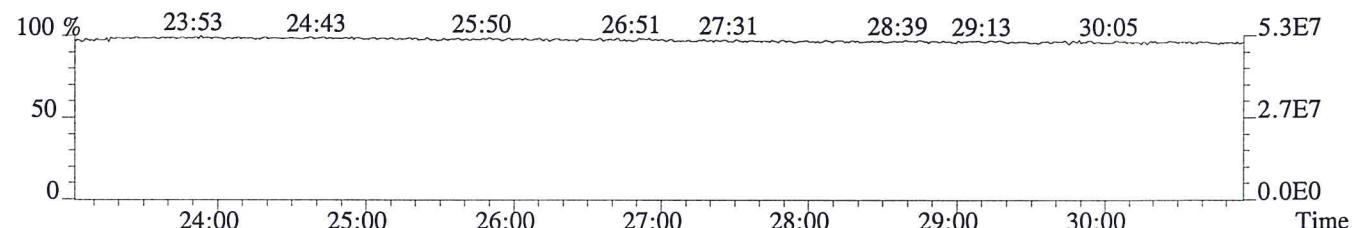
317.9389 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,2008.0,1.00%,F,T)



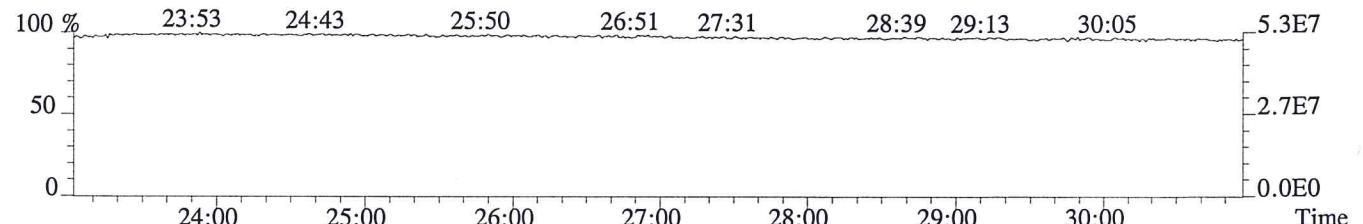
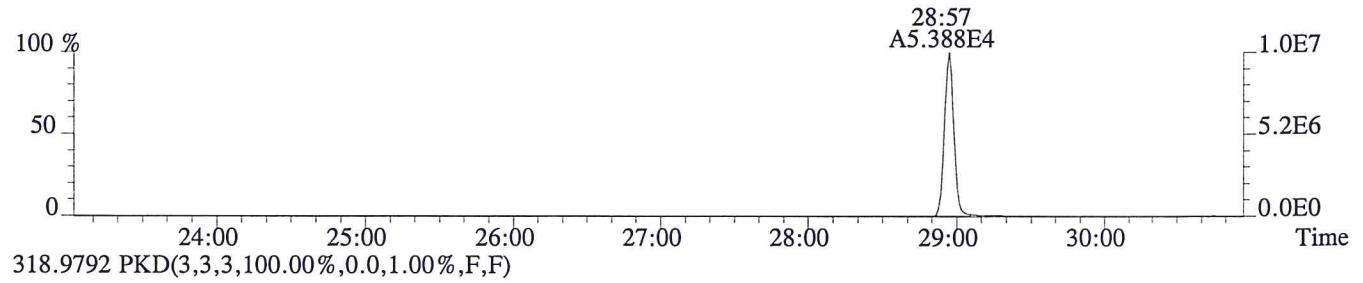
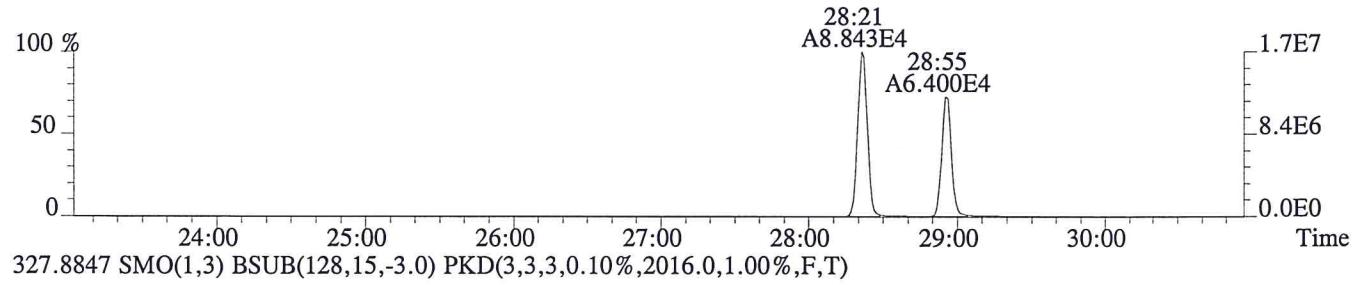
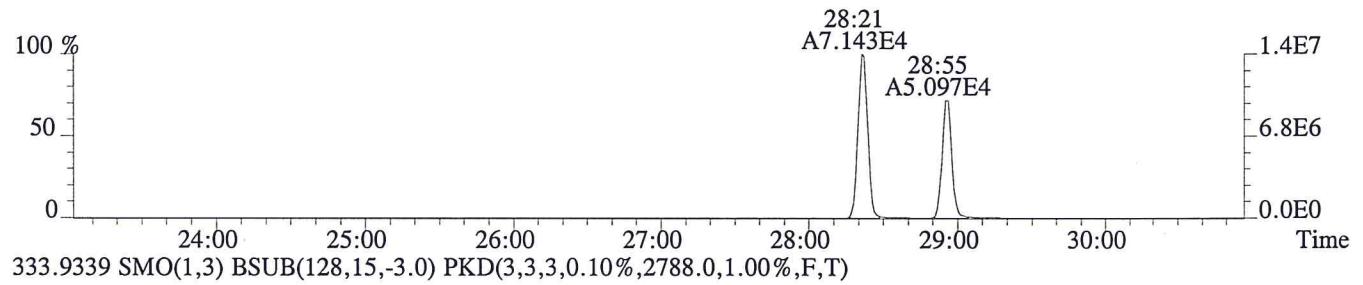
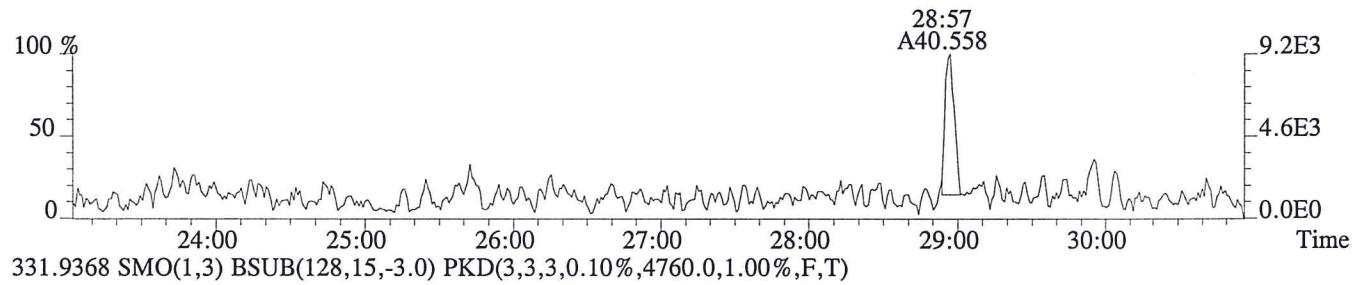
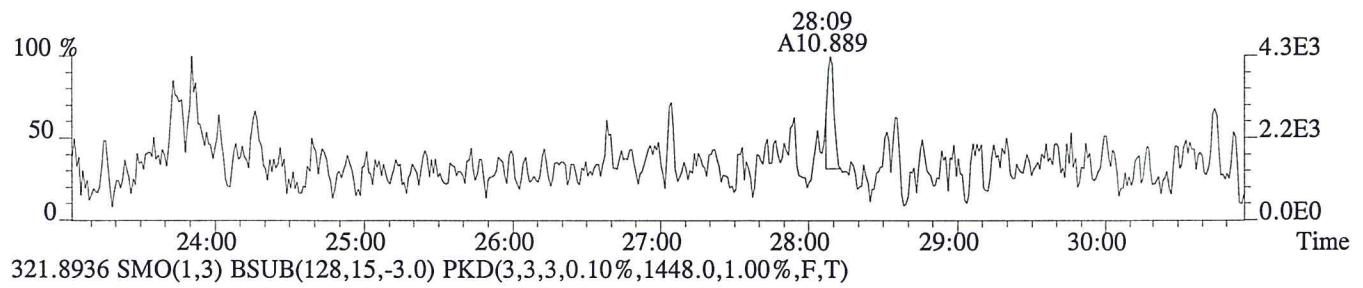
375.8364 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



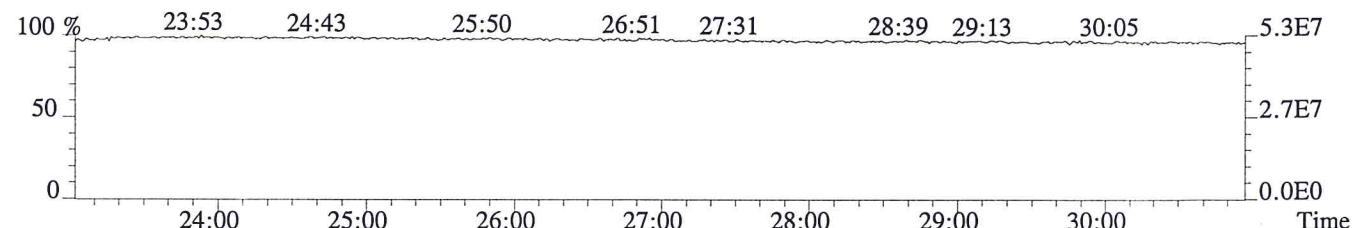
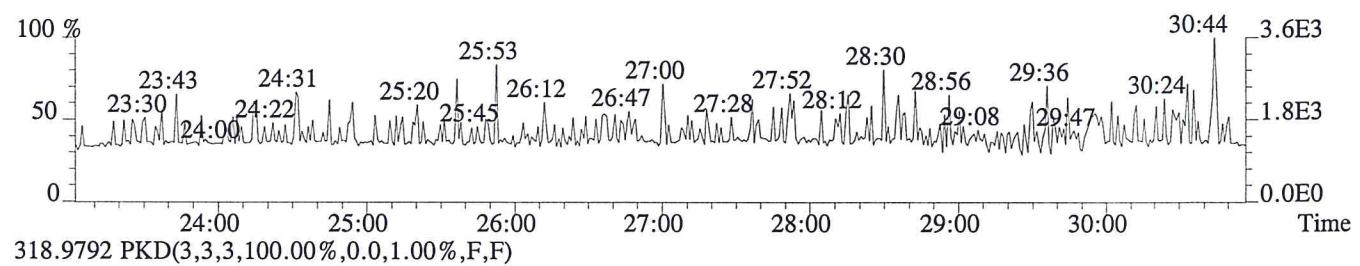
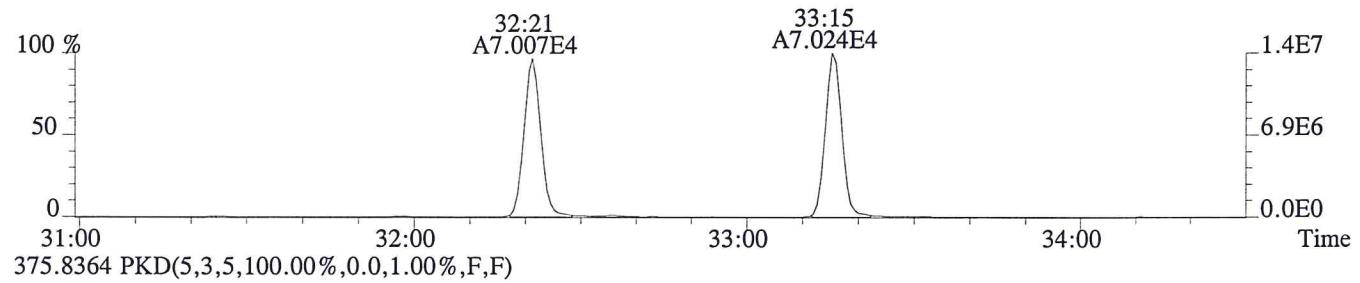
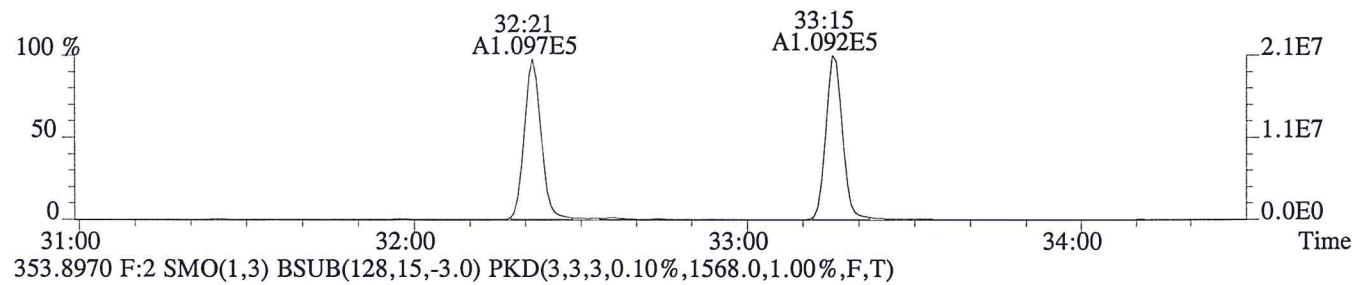
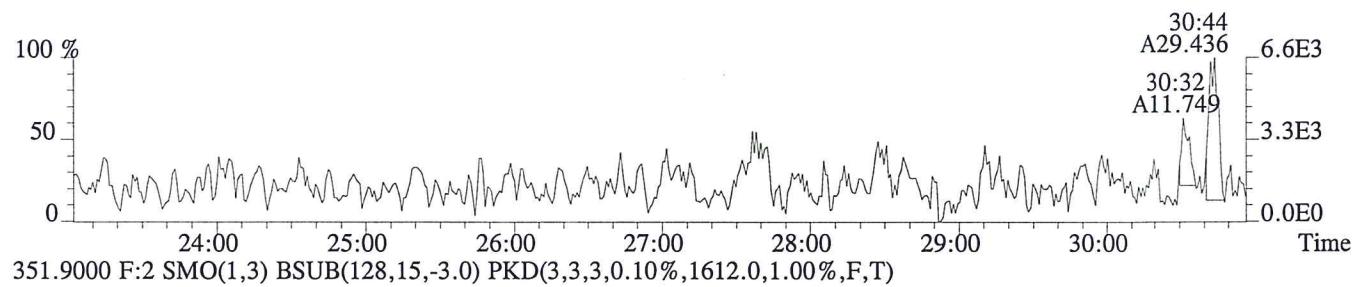
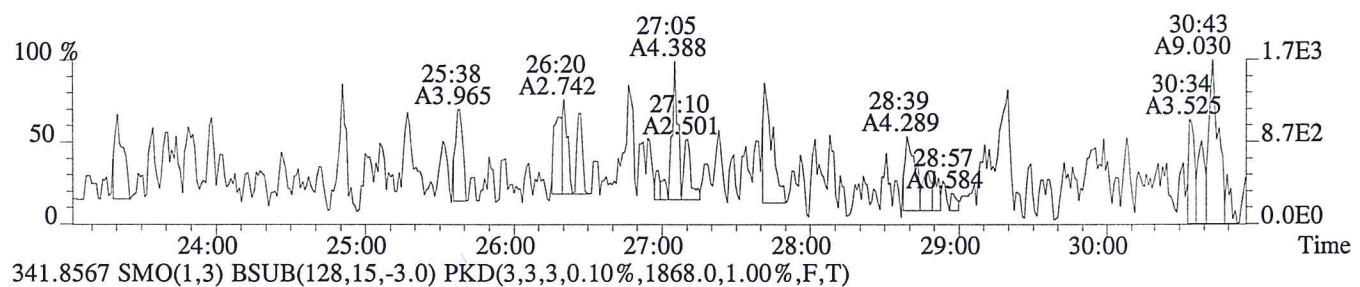
318.9792 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



File:P600942 #1-562 Acq:13-OCT-2015 16:12:14 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:MB  
 319.8965 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1844.0,1.00%,F,T)



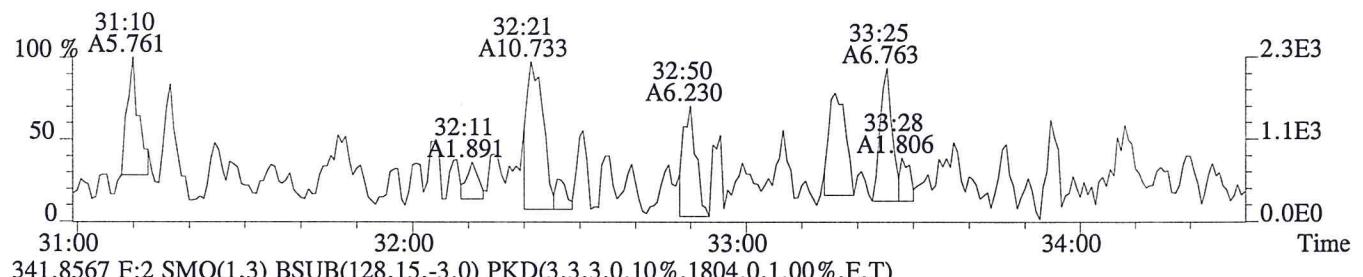
File:P600942 #1-562 Acq:13-OCT-2015 16:12:14 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:MB  
 339.8597 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,568.0,1.00%,F,T)



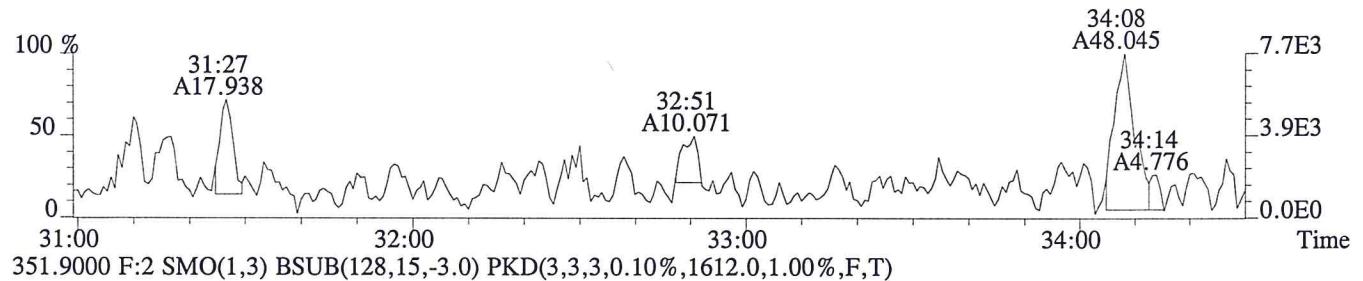
File:P600942 #1-317 Acq:13-OCT-2015 16:12:14 Probe EI+ Magnet SIR VG BioTech Mass spectr

Sample#1 Exp:MB

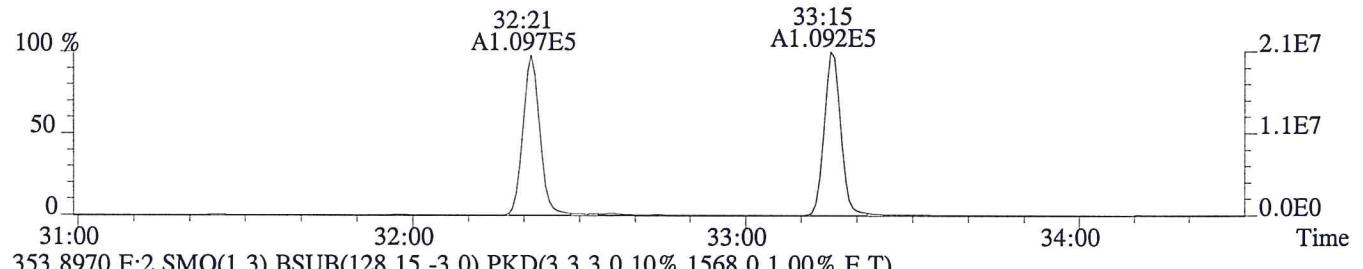
339.8597 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,700.0,1.00%,F,T)



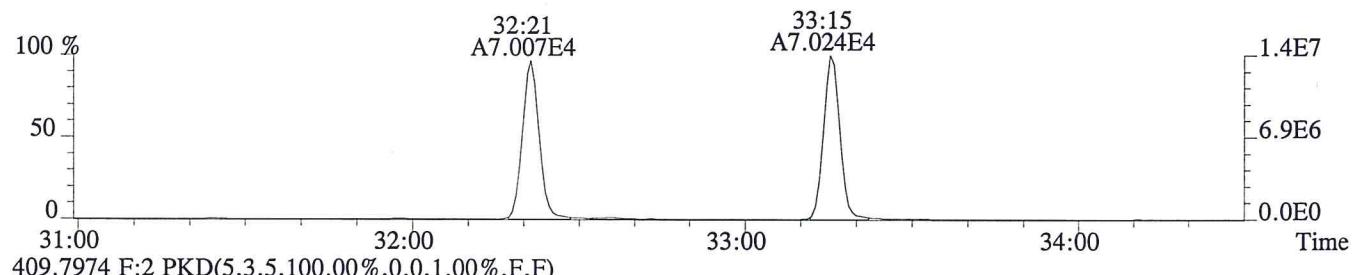
341.8567 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1804.0,1.00%,F,T)



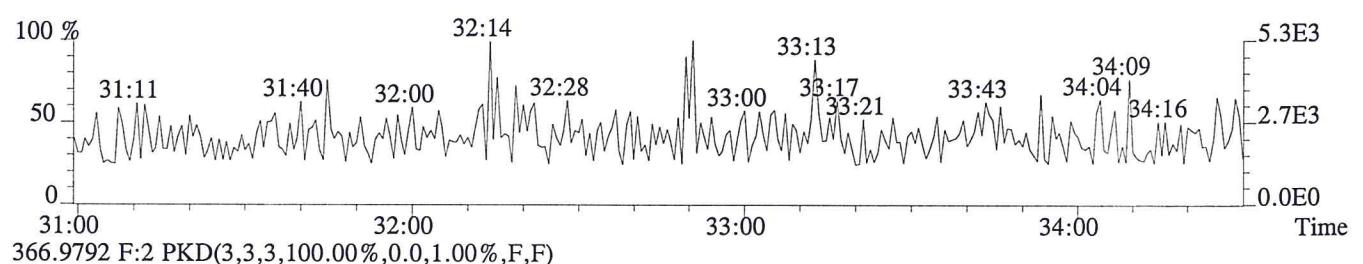
351.9000 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1612.0,1.00%,F,T)



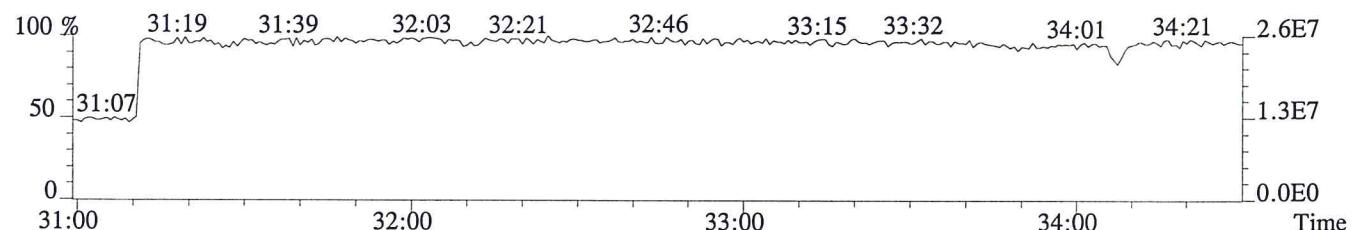
353.8970 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1568.0,1.00%,F,T)



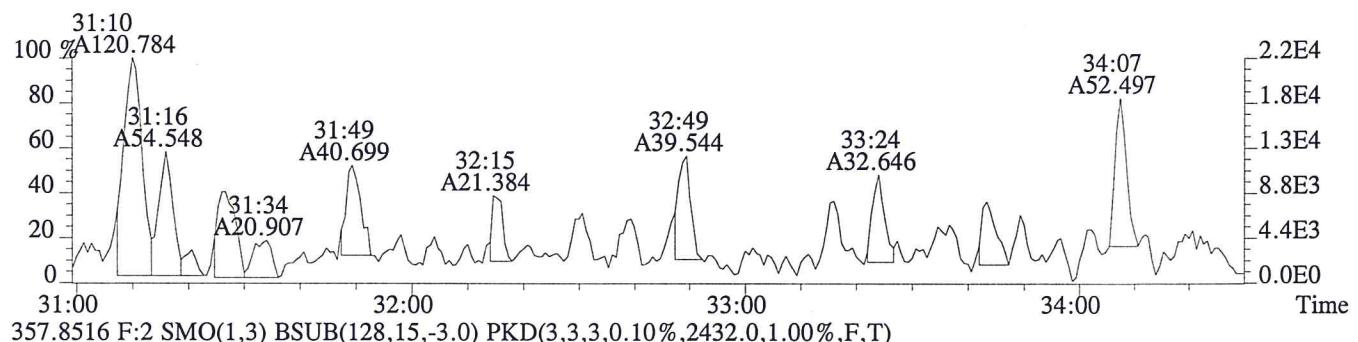
409.7974 F:2 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



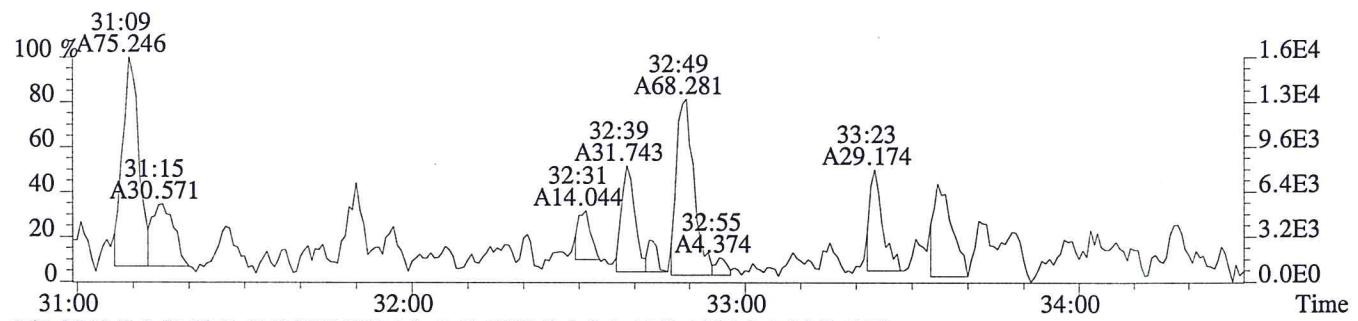
366.9792 F:2 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



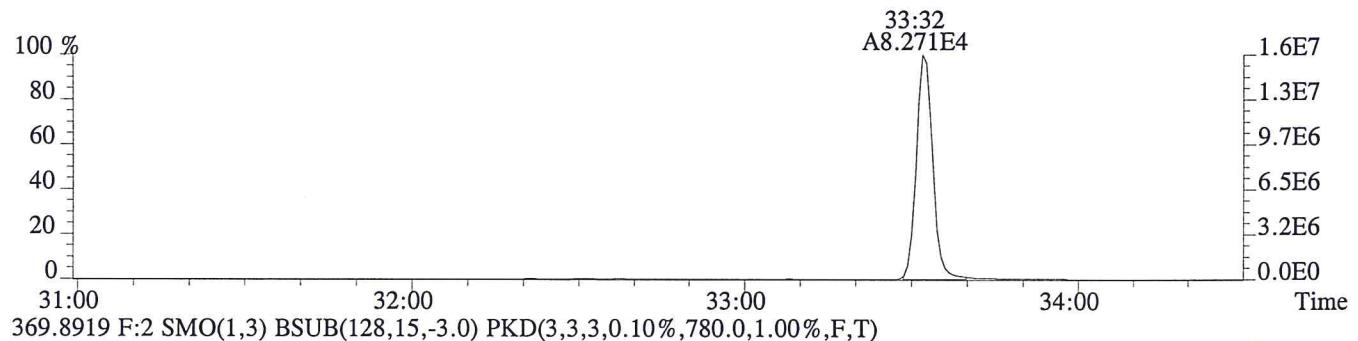
File:P600942 #1-317 Acq:13-OCT-2015 16:12:14 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:MB  
 355.8546 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,3652.0,1.00%,F,T)



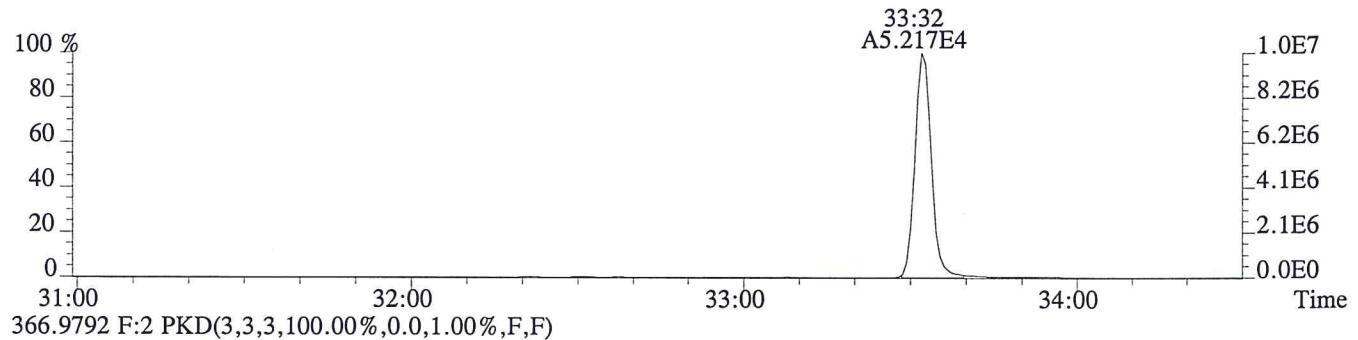
357.8516 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,2432.0,1.00%,F,T)



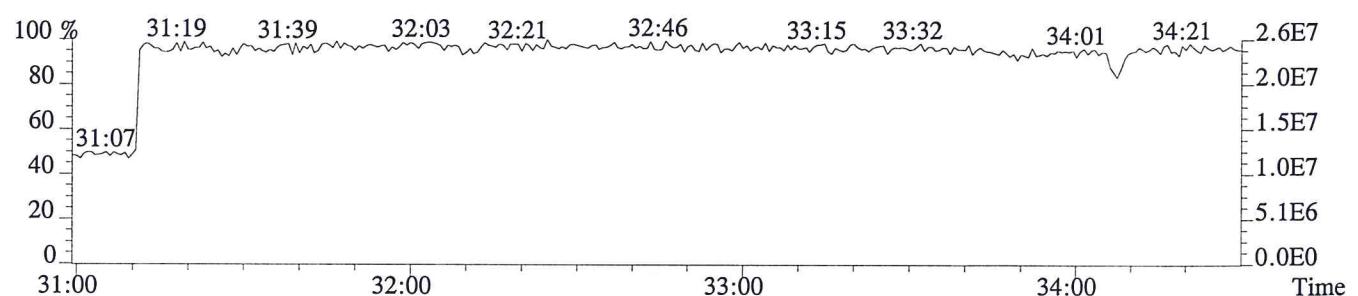
367.8949 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1304.0,1.00%,F,T)



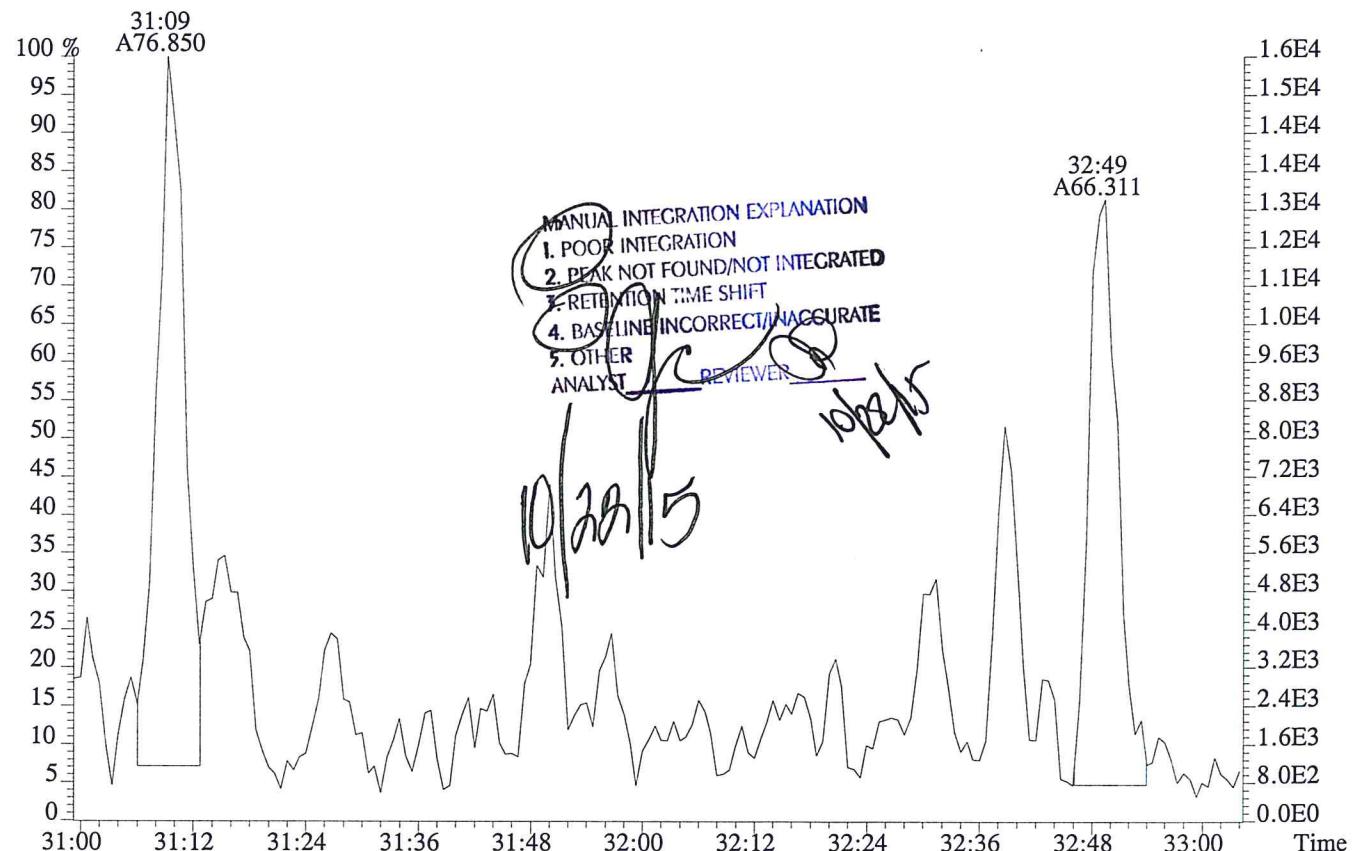
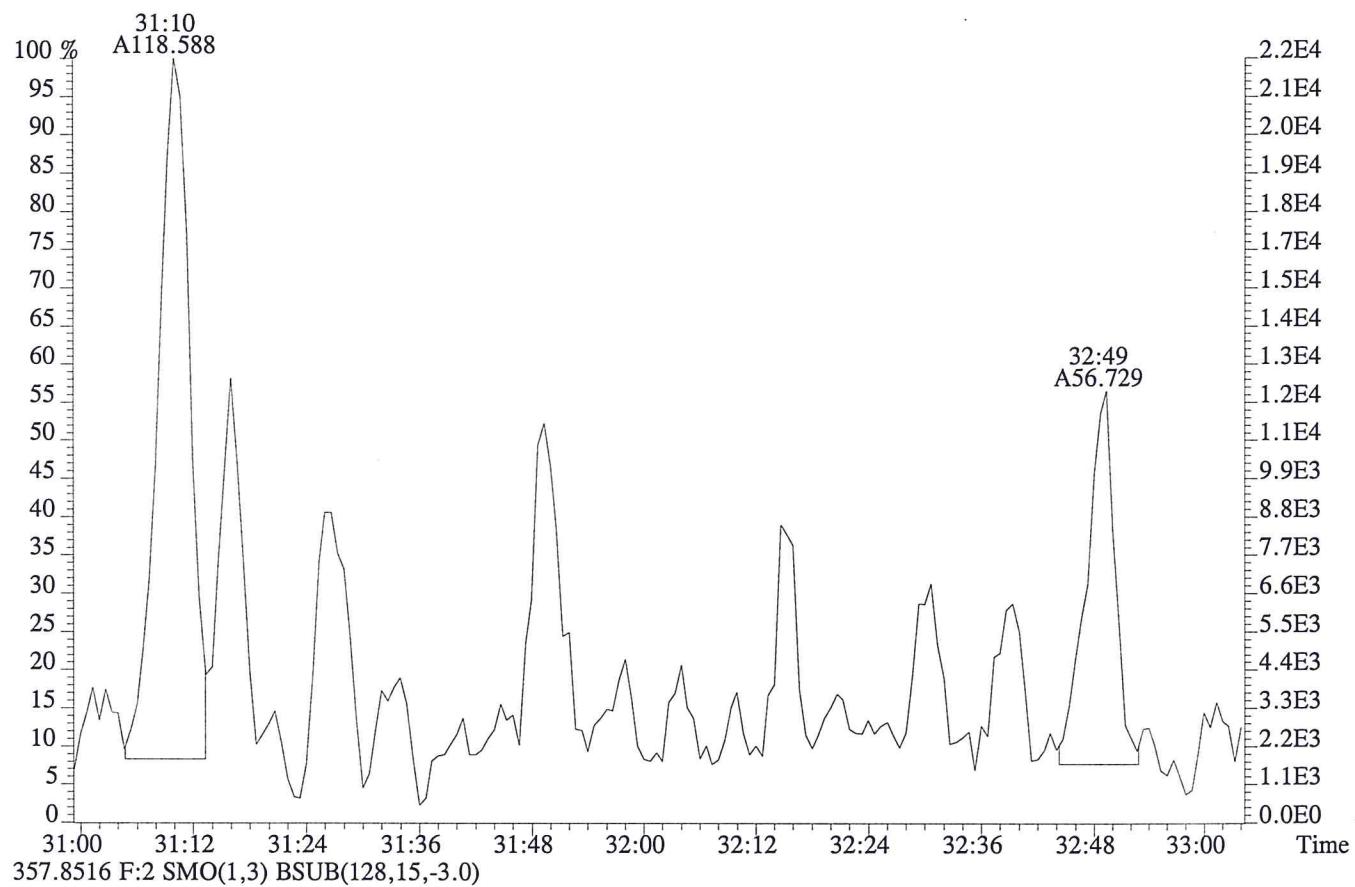
369.8919 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,780.0,1.00%,F,T)



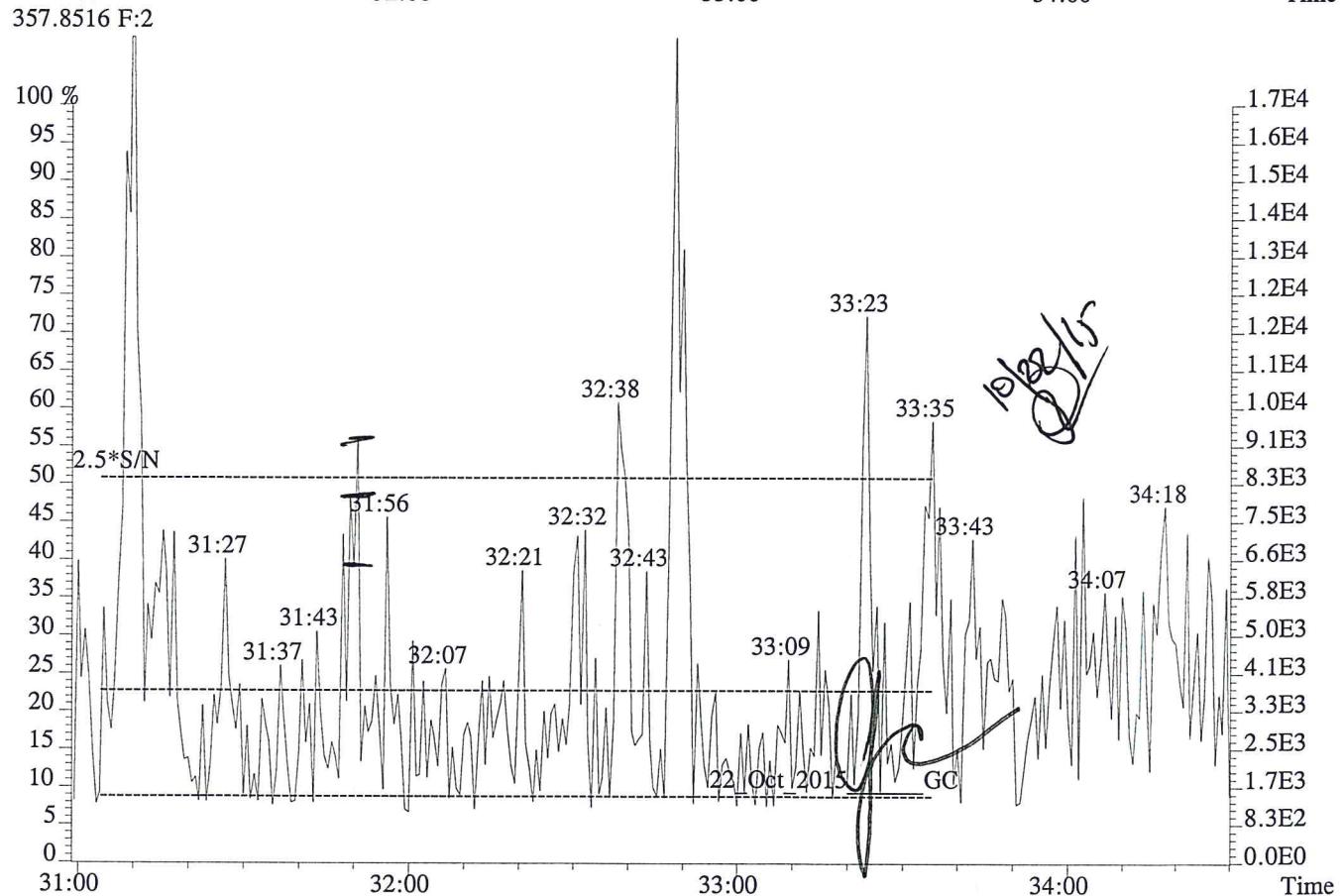
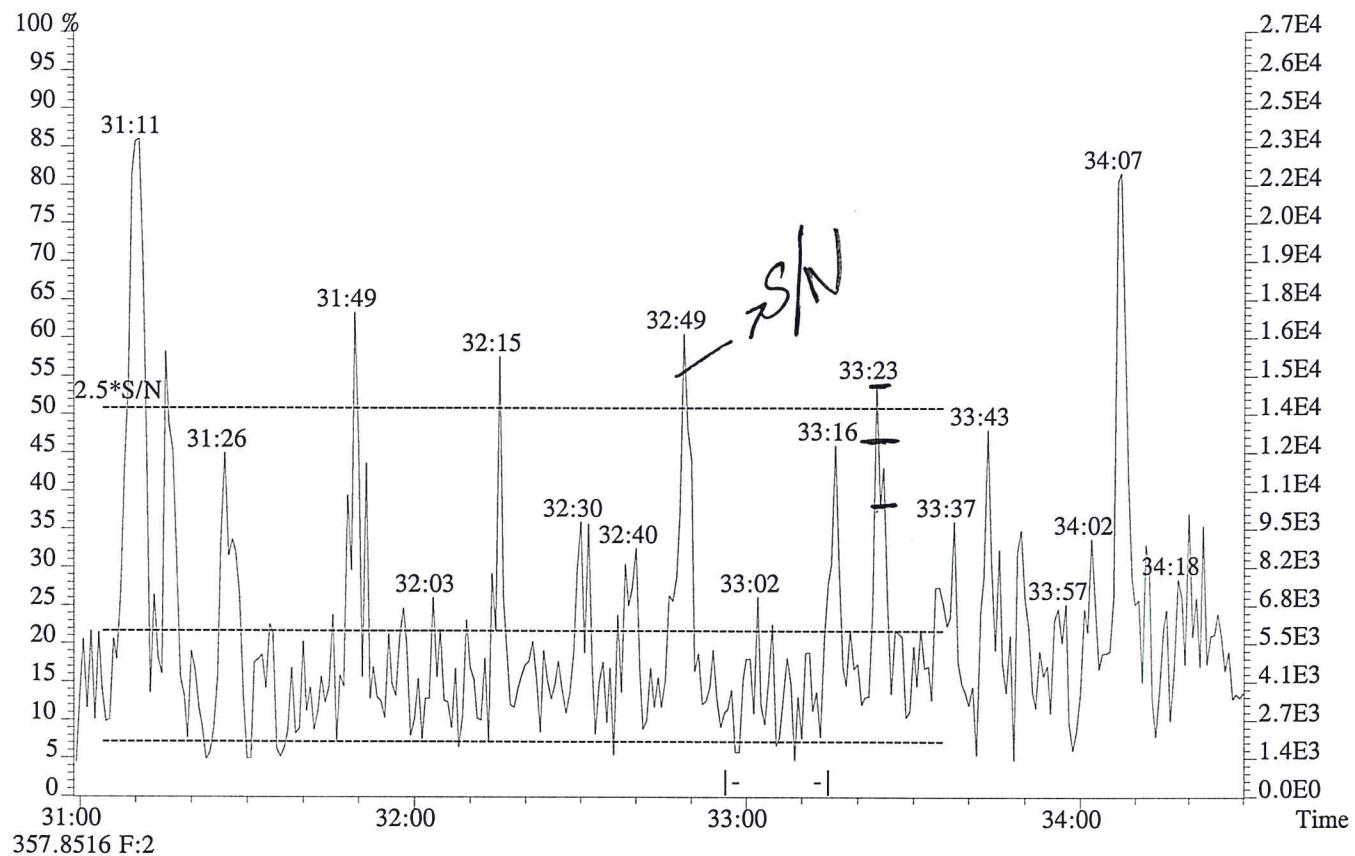
366.9792 F:2 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



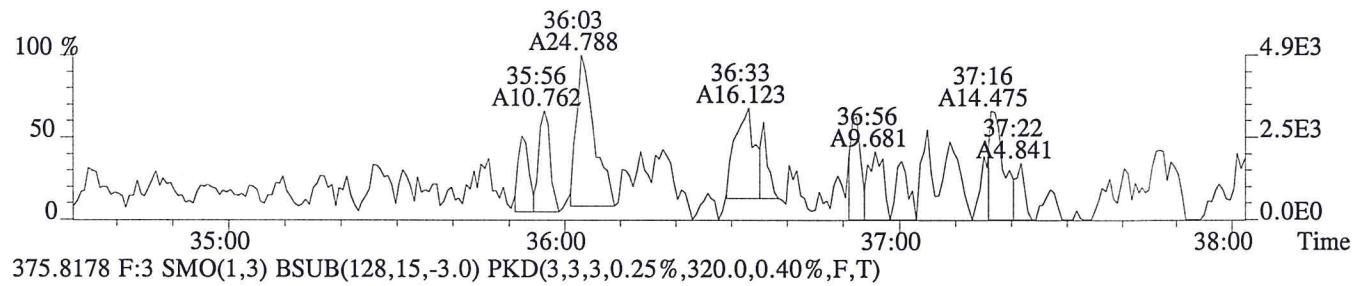
File:P600942 #1-317 Acq:13-OCT-2015 16:12:14 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:MB  
 355.8546 F:2 SMO(1,3) BSUB(128,15,-3.0)



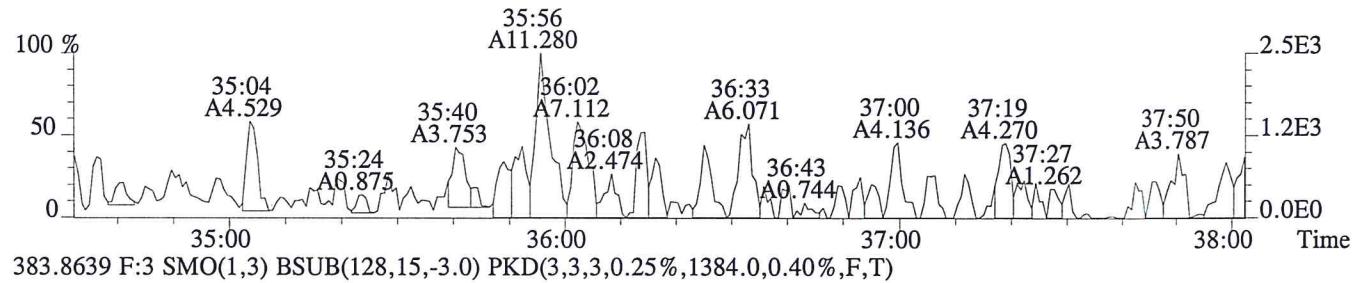
File:P600942 #1-317 Acq:13-OCT-2015 16:12:14 Probe EI+ Magnet SIR VG BioTech Mass spectf  
Sample#1 Exp:MB  
355.8546 F:2



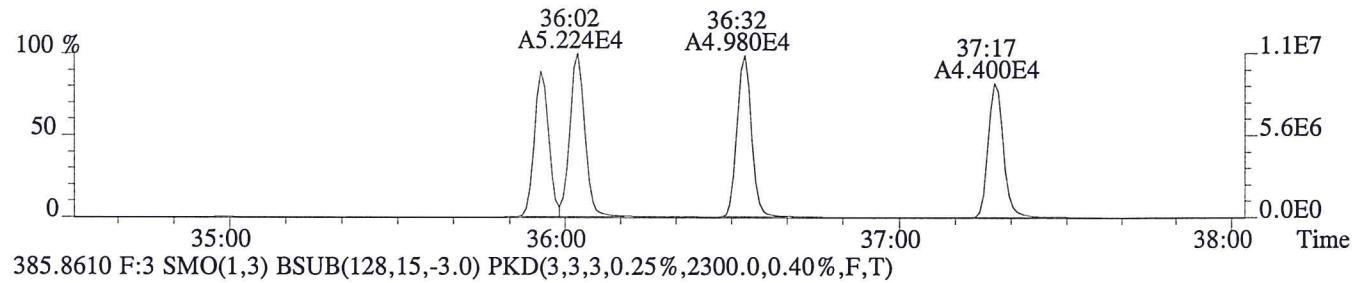
File:P600942 #1-316 Acq:13-OCT-2015 16:12:14 Probe EI+ Magnet SIR VG BioTech Mass spectr  
 Sample#1 Exp:MB  
 373.8208 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1104.0,0.40%,F,T)



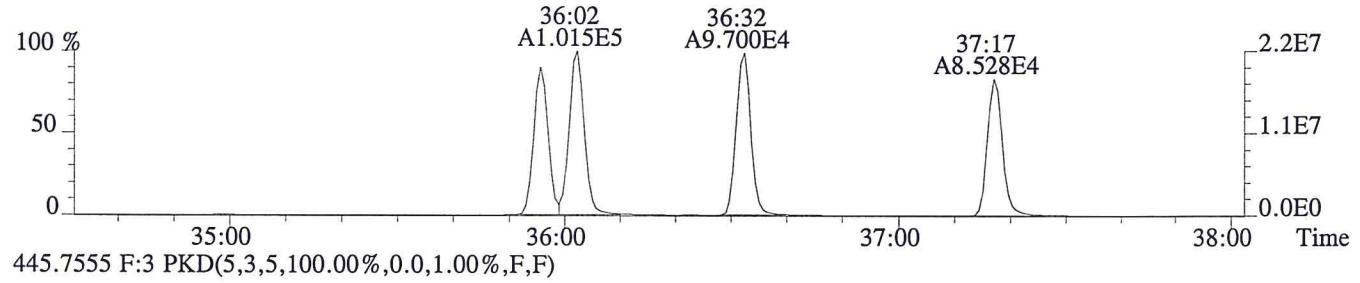
375.8178 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,320.0,0.40%,F,T)



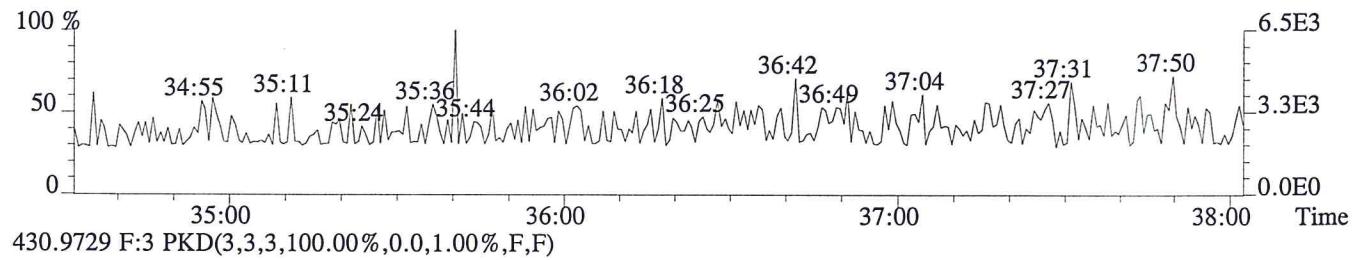
383.8639 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1384.0,0.40%,F,T)



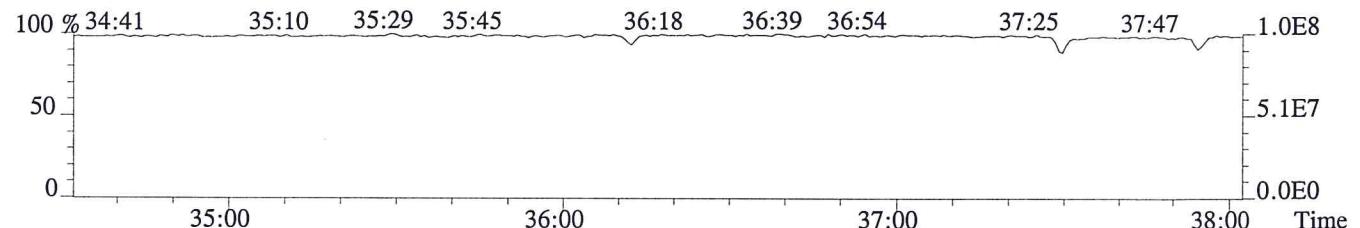
385.8610 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,2300.0,0.40%,F,T)



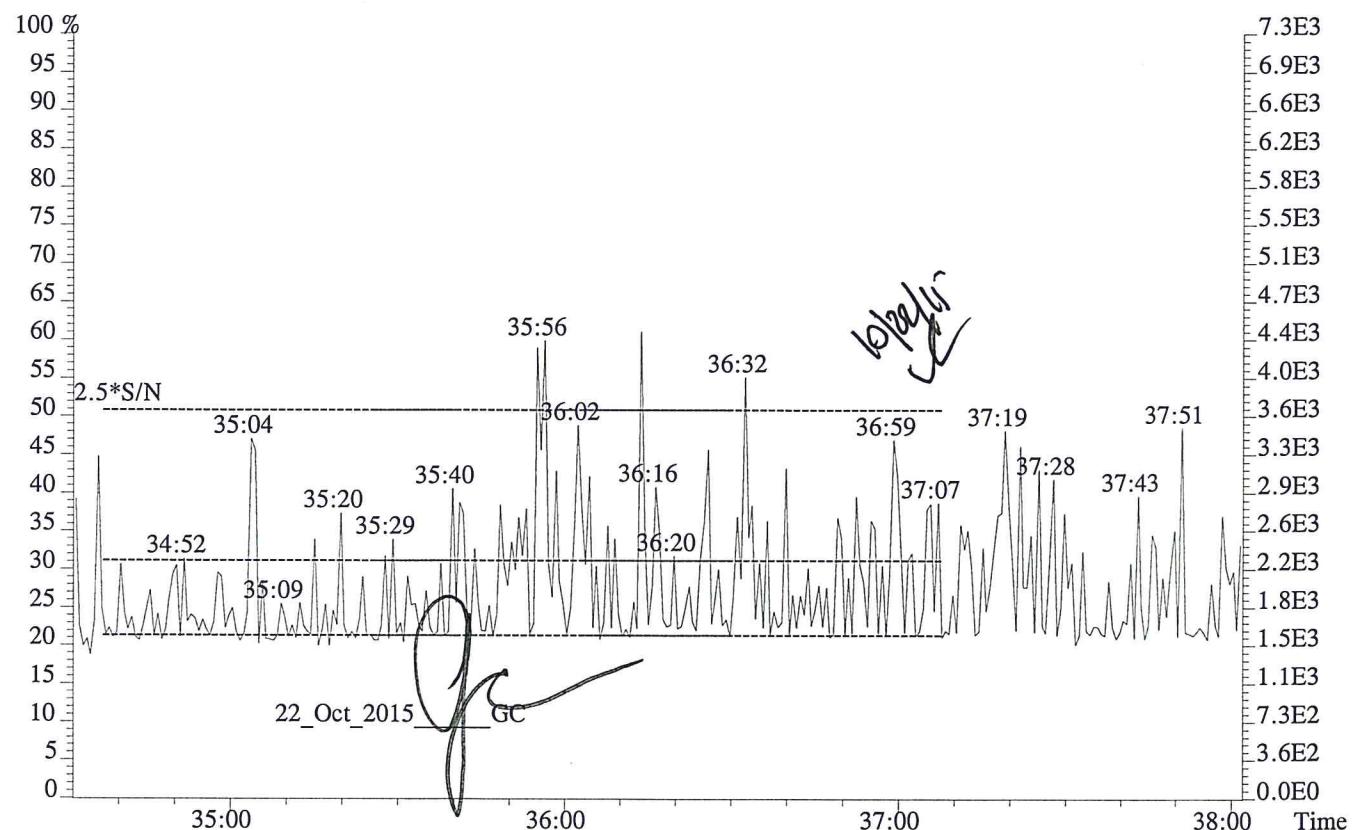
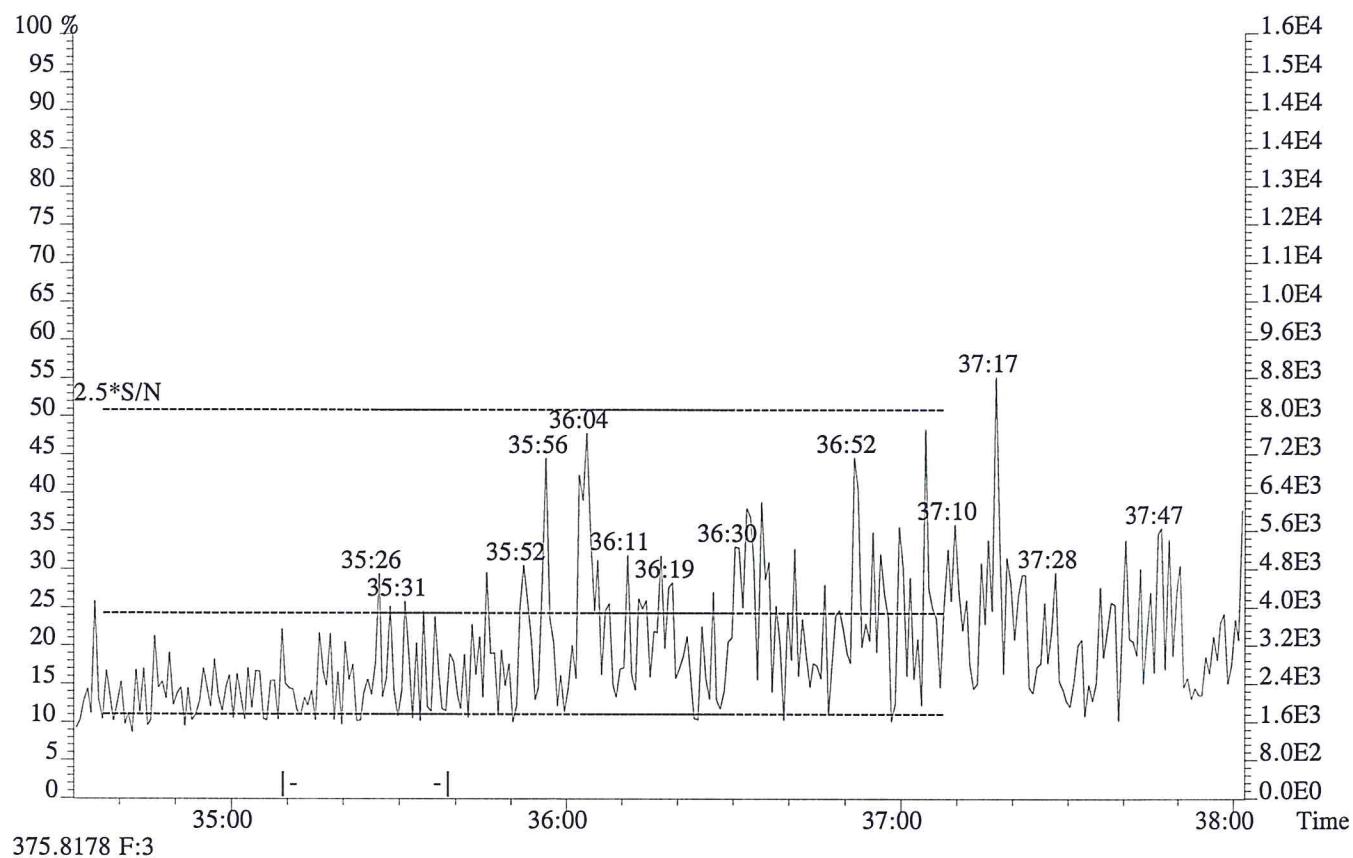
445.7555 F:3 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



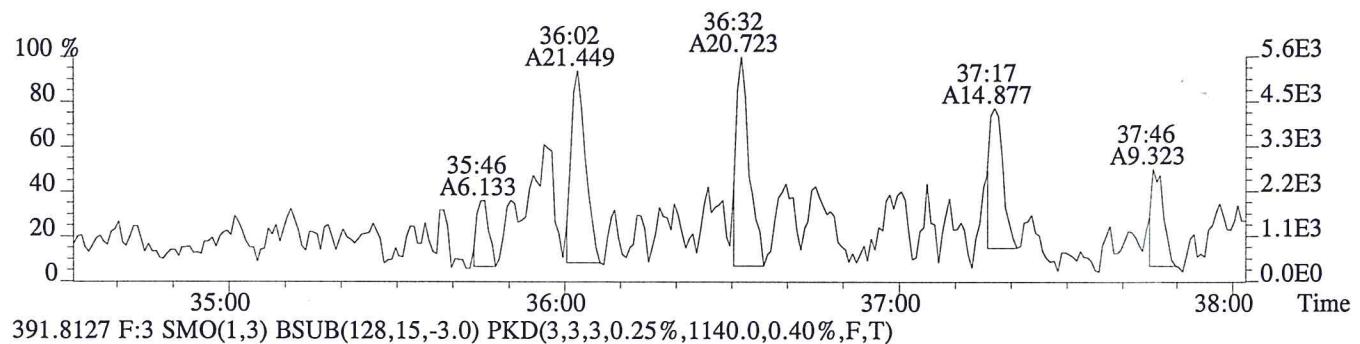
430.9729 F:3 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



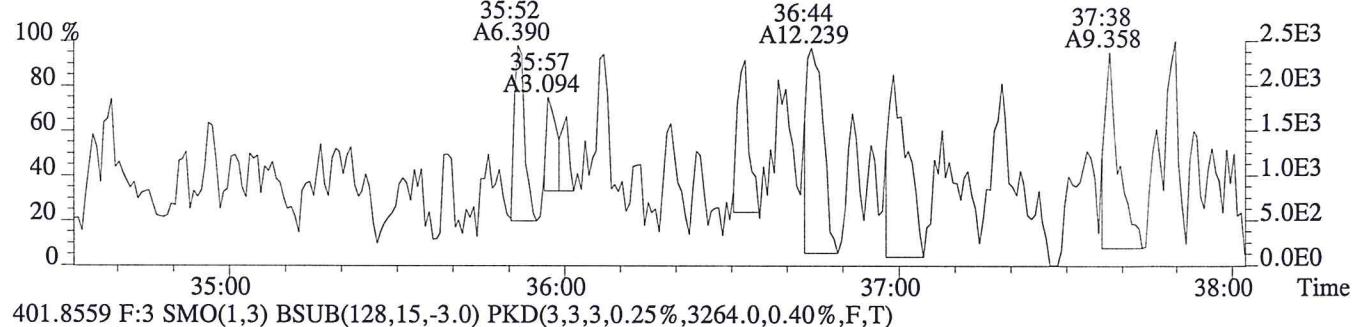
File:P600942 #1-316 Acq:13-OCT-2015 16:12:14 Probe EI+ Magnet SIR VG BioTech Mass spectf  
Sample#1 Exp:MB  
373.8208 F:3



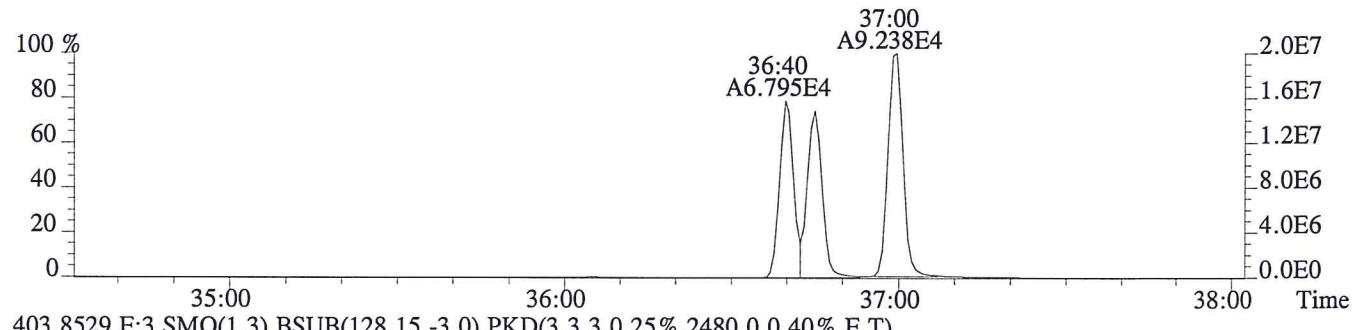
File:P600942 #1-316 Acq:13-OCT-2015 16:12:14 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:MB  
 389.8157 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1336.0,0.40%,F,T)



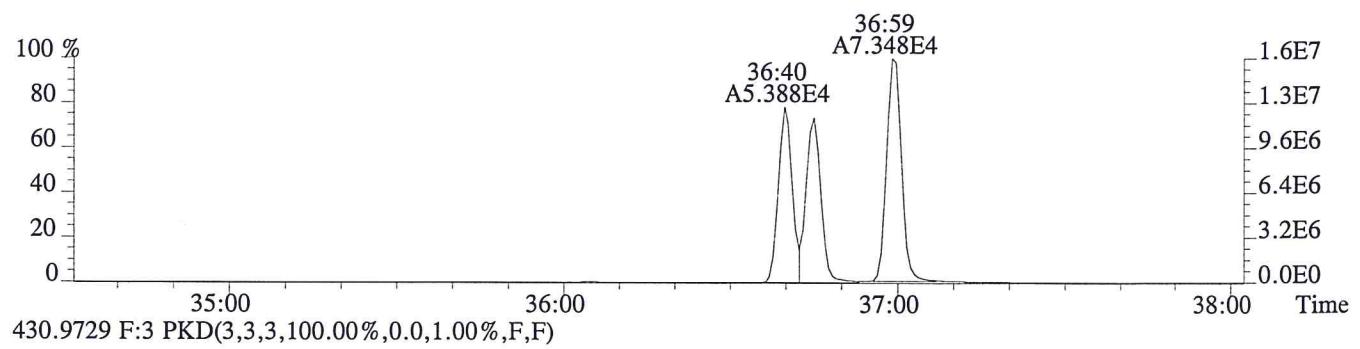
391.8127 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1140.0,0.40%,F,T)



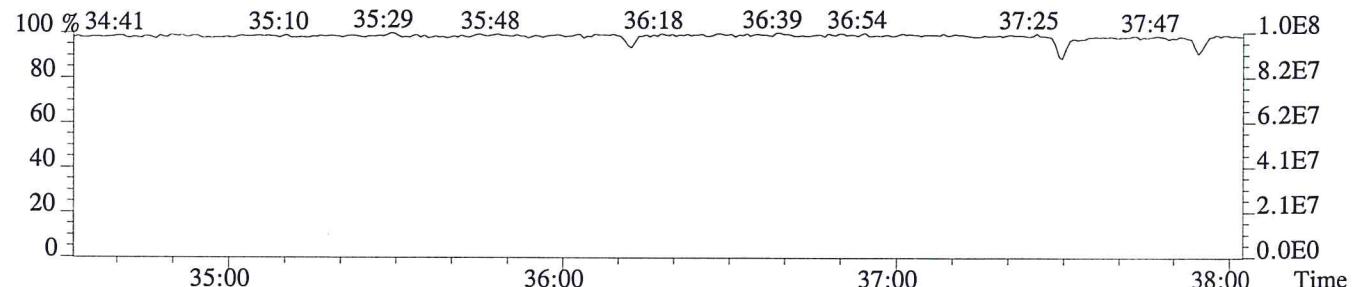
401.8559 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,3264.0,0.40%,F,T)



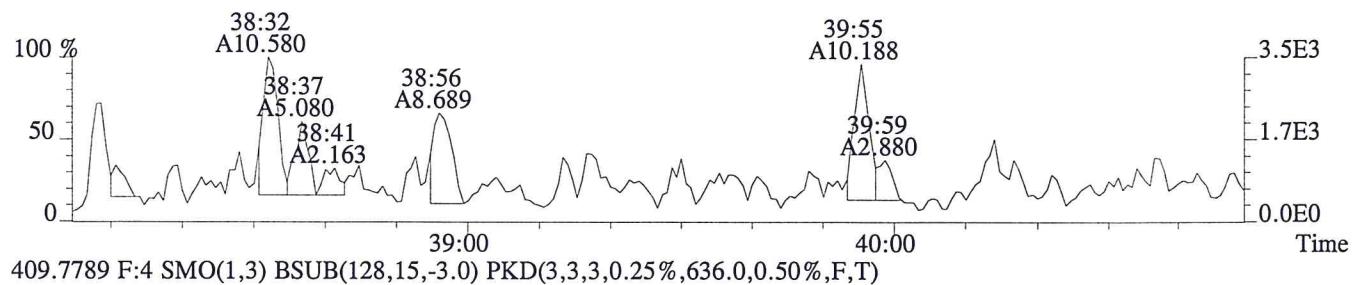
403.8529 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,2480.0,0.40%,F,T)



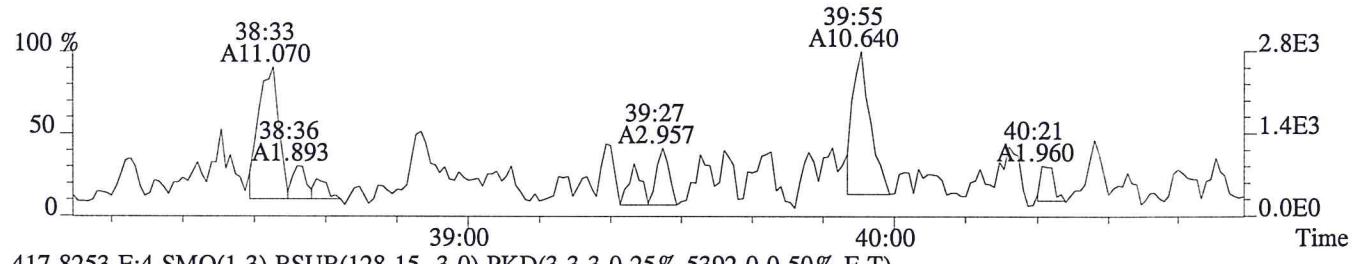
430.9729 F:3 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



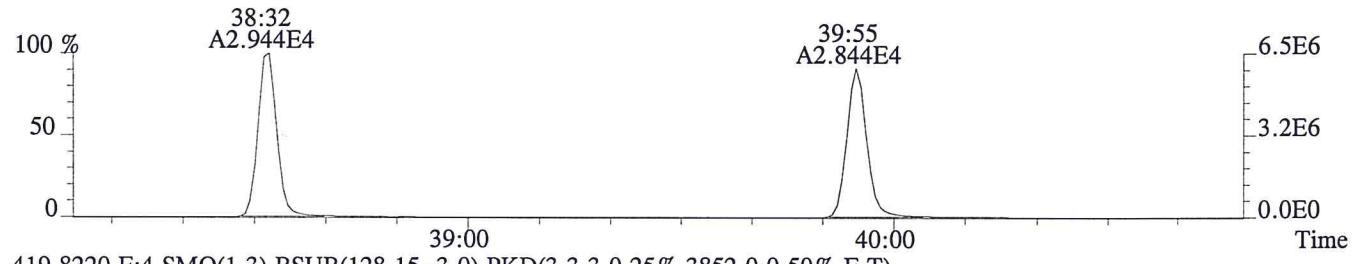
File:P600942 #1-248 Acq:13-OCT-2015 16:12:14 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:MB  
 407.7818 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,968.0,0.50%,F,T)



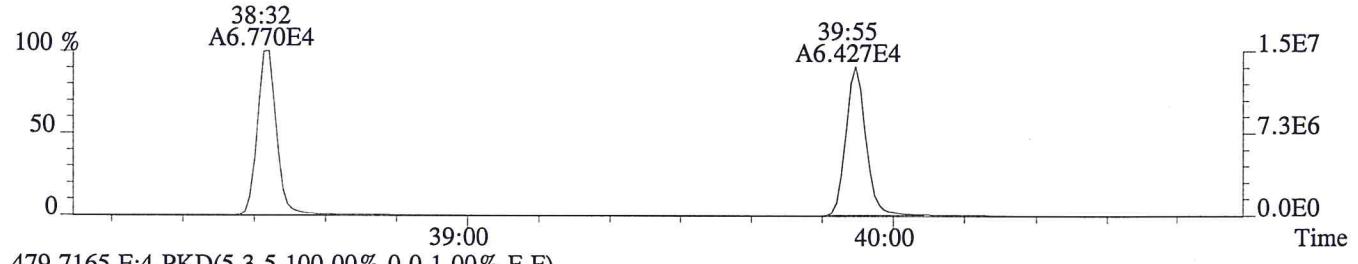
409.7789 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,636.0,0.50%,F,T)



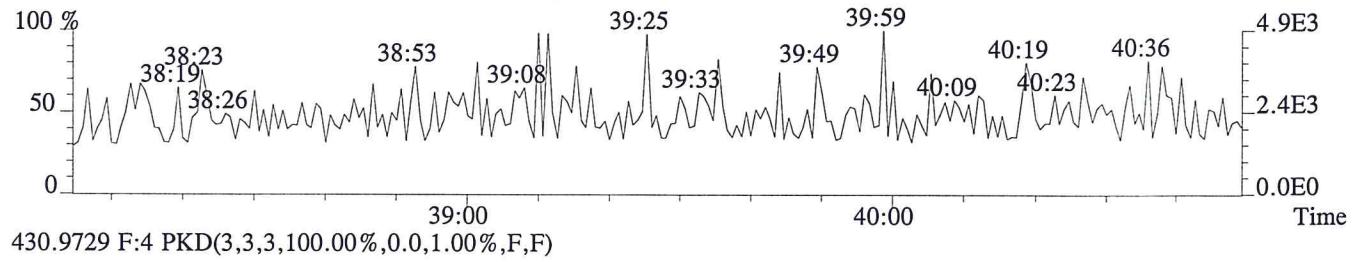
417.8253 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,5392.0,0.50%,F,T)



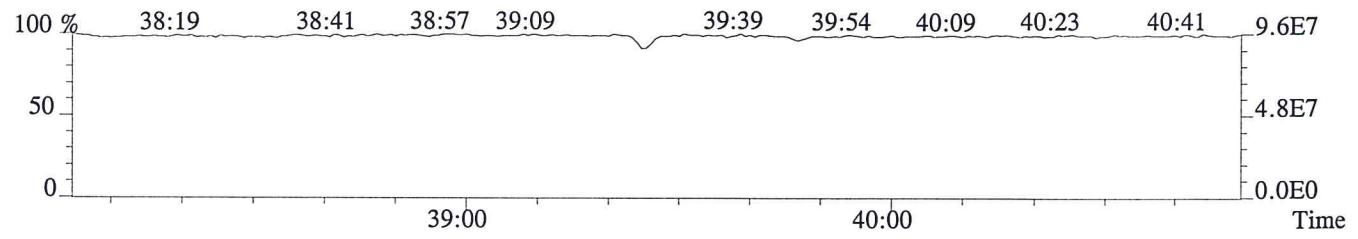
419.8220 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,3852.0,0.50%,F,T)



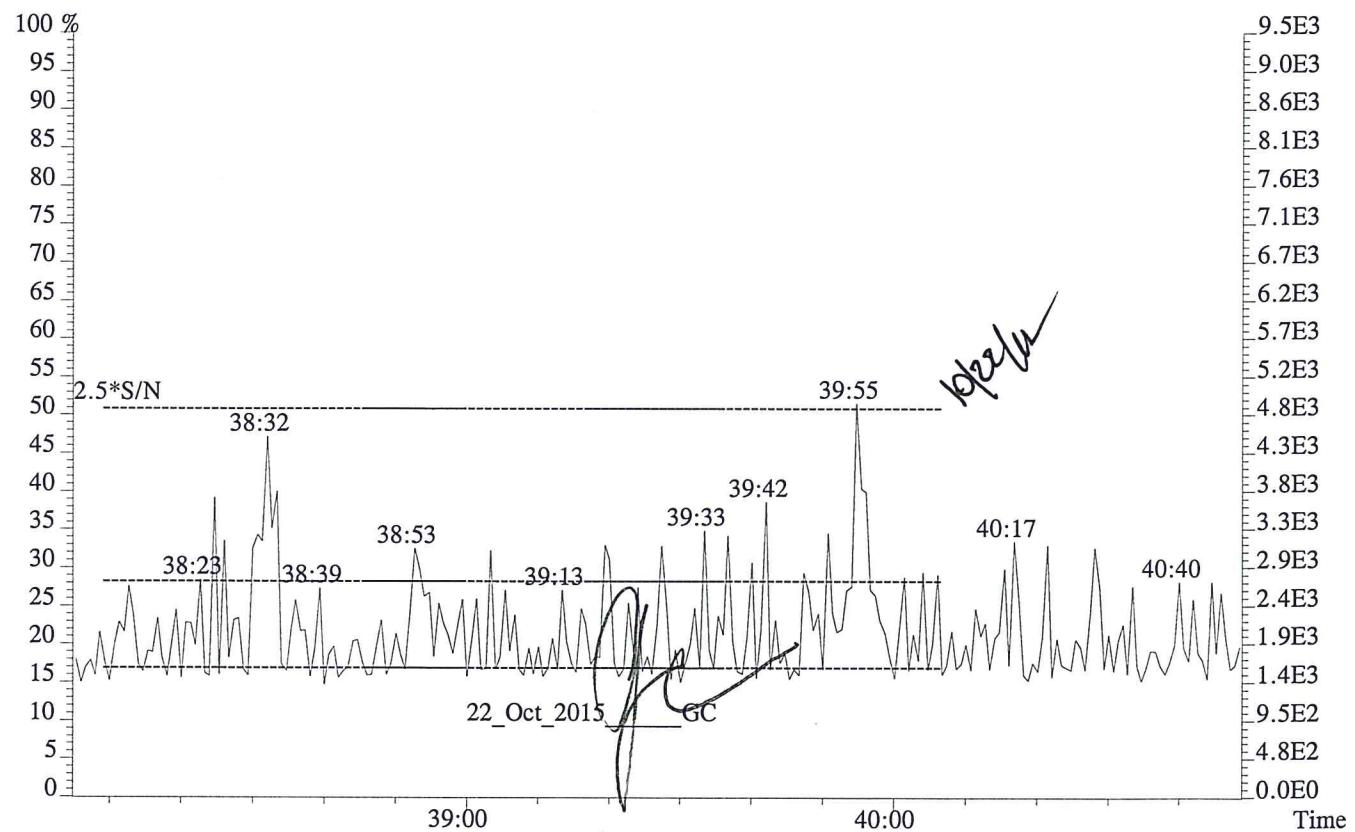
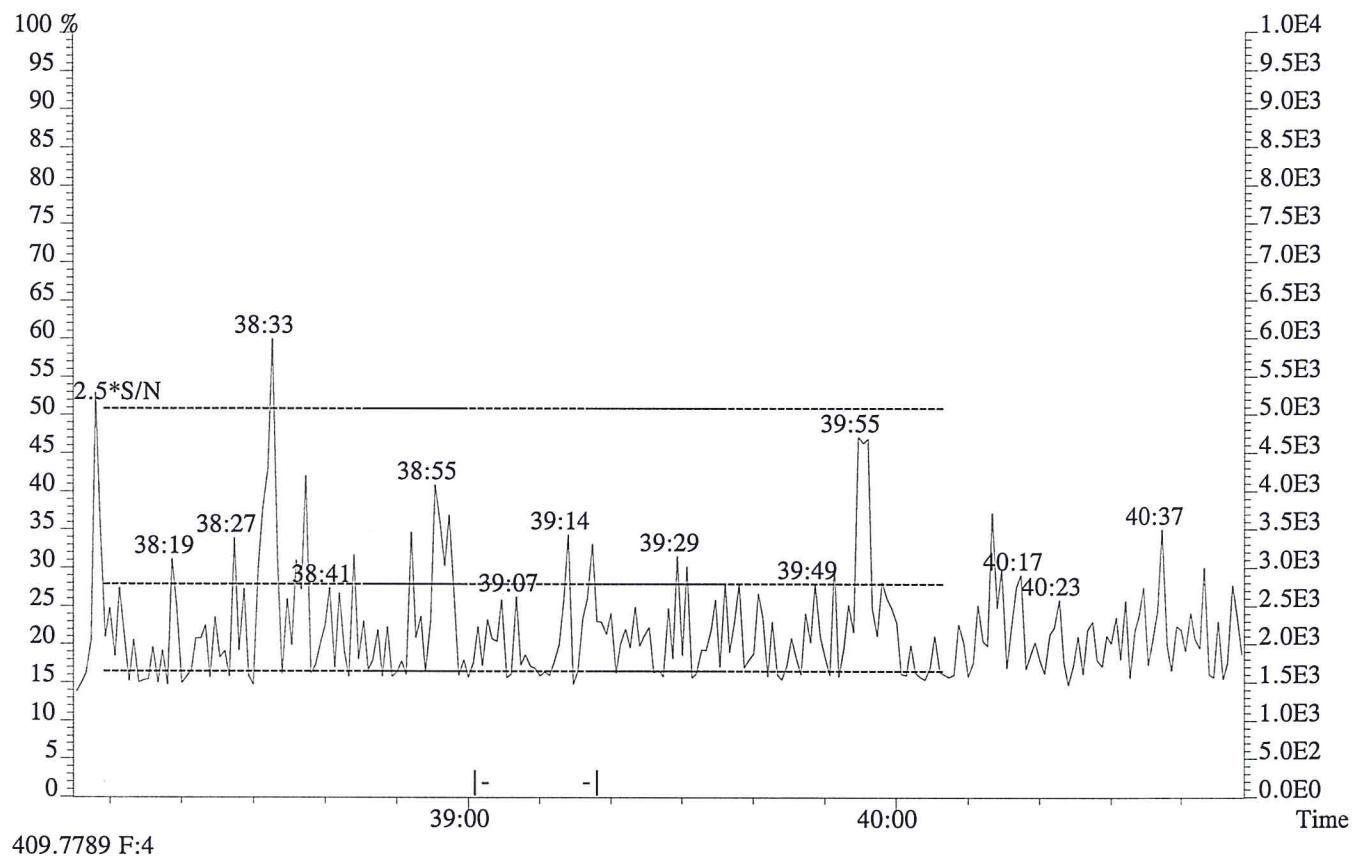
479.7165 F:4 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



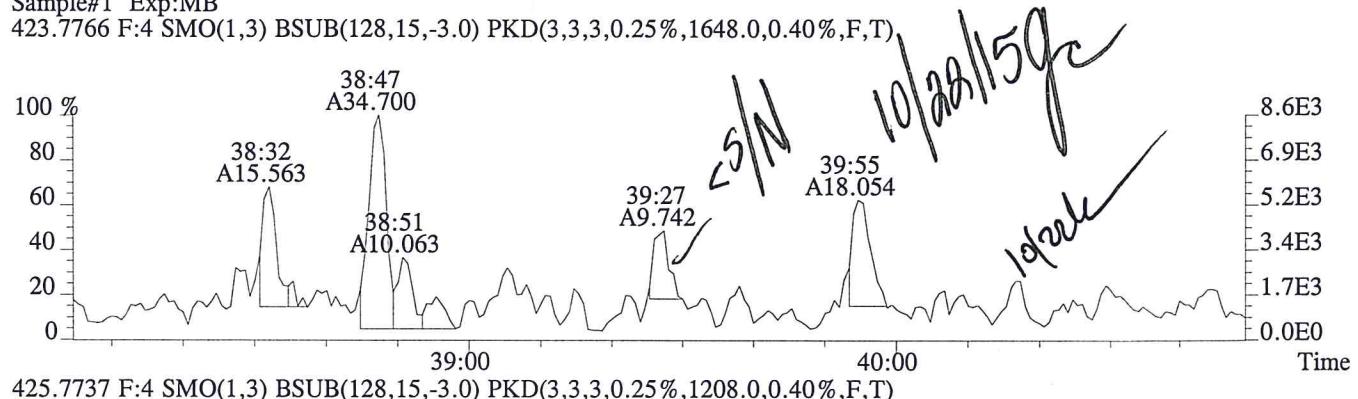
430.9729 F:4 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



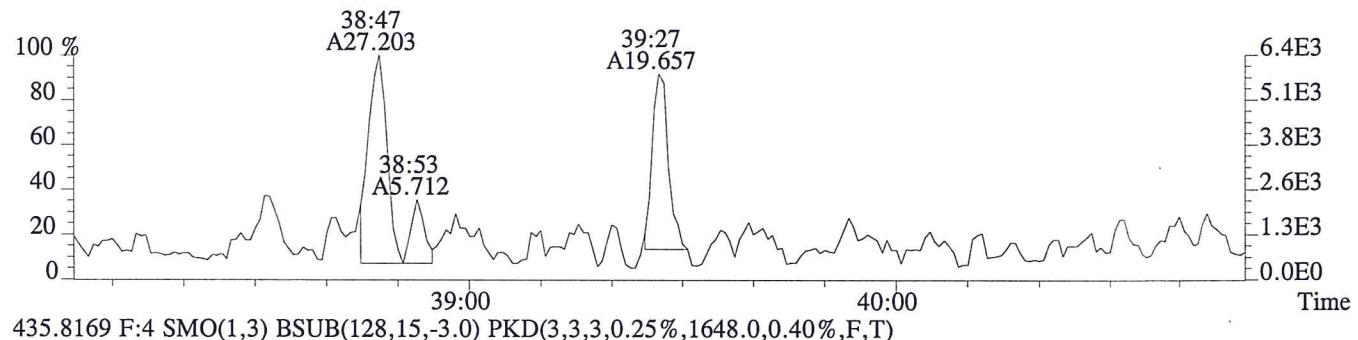
File:P600942 #1-248 Acq:13-OCT-2015 16:12:14 Probe EI+ Magnet SIR VG BioTech Mass spectf  
Sample#1 Exp:MB  
407.7818 F:4



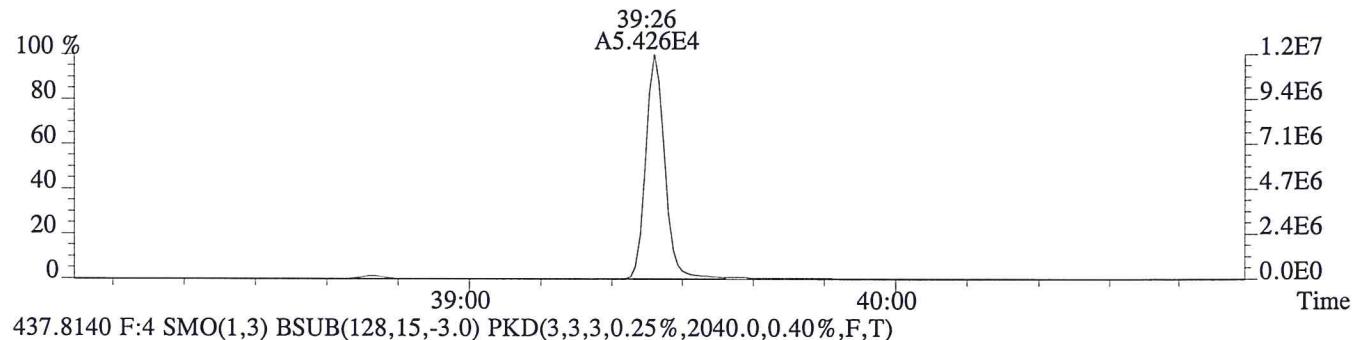
File:P600942 #1-248 Acq:13-OCT-2015 16:12:14 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:MB  
 423.7766 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1648.0,0.40%,F,T)



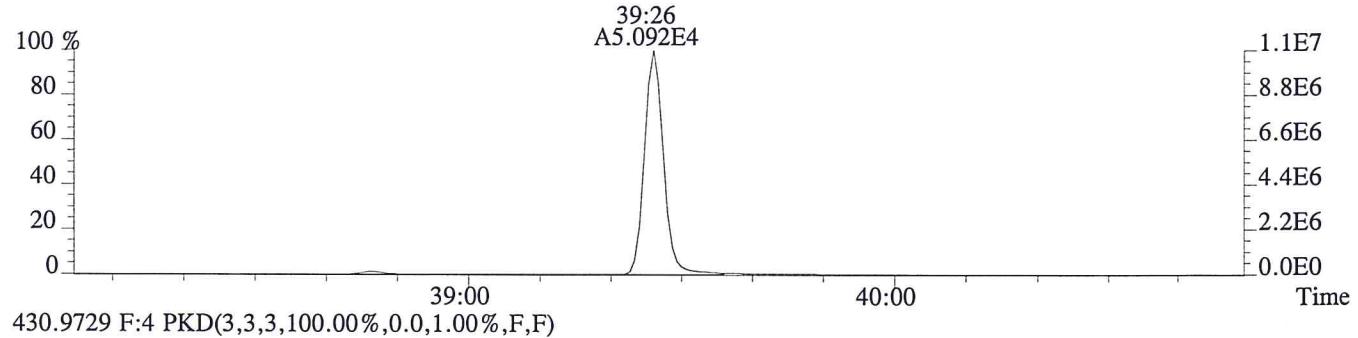
425.7737 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1208.0,0.40%,F,T)



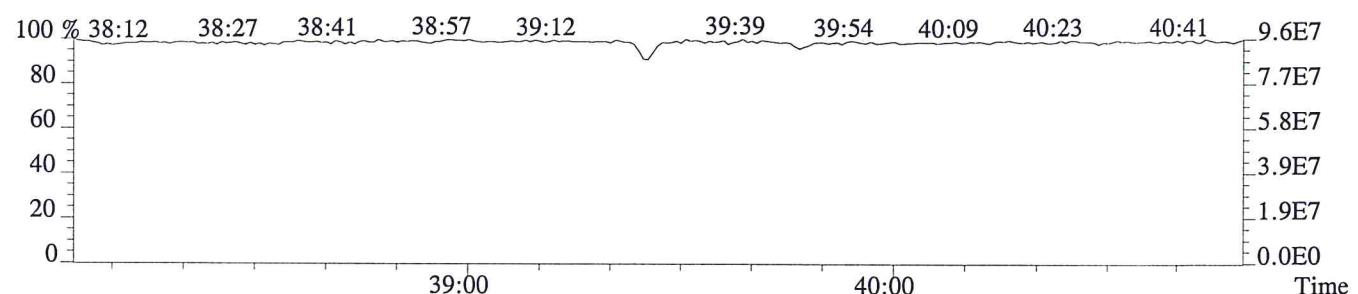
435.8169 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1648.0,0.40%,F,T)



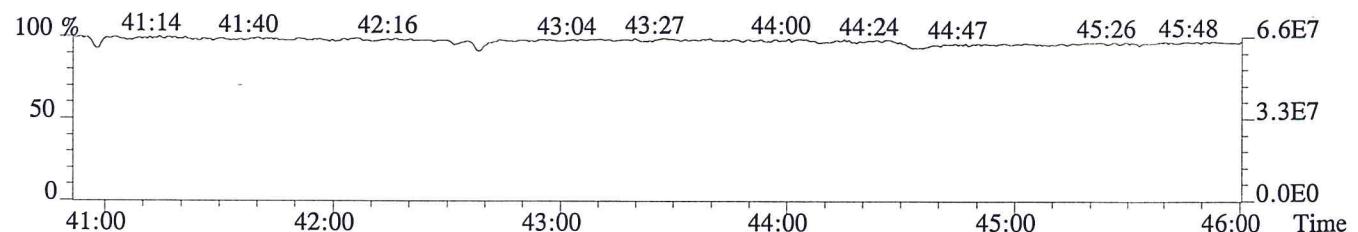
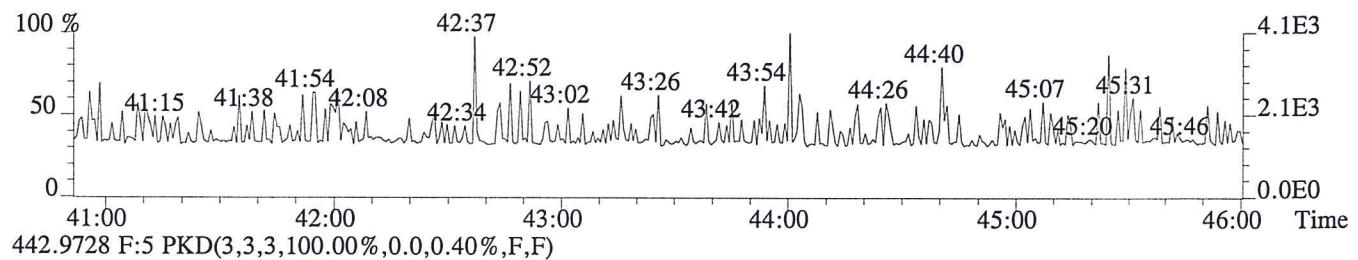
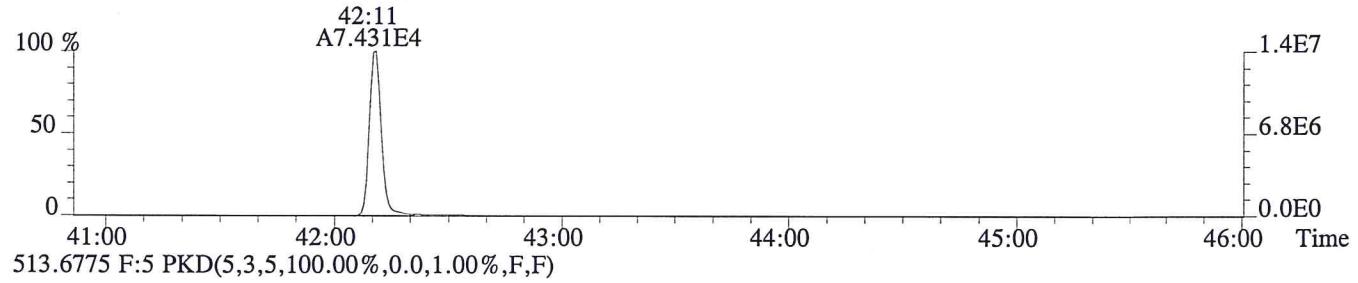
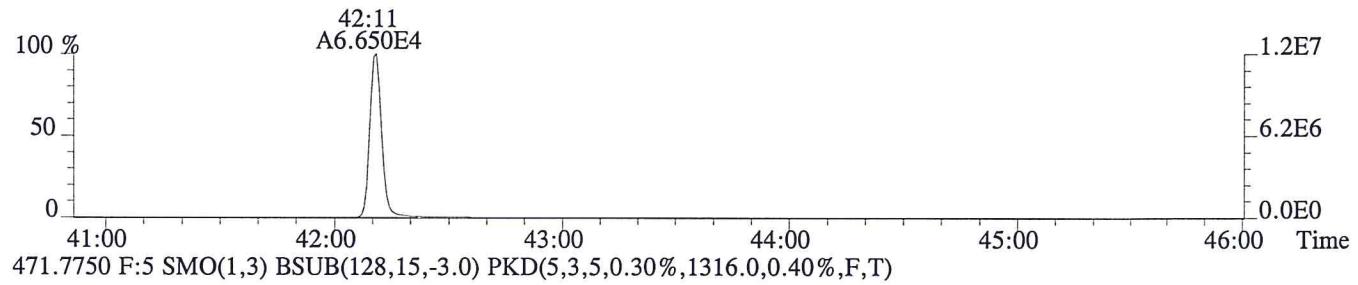
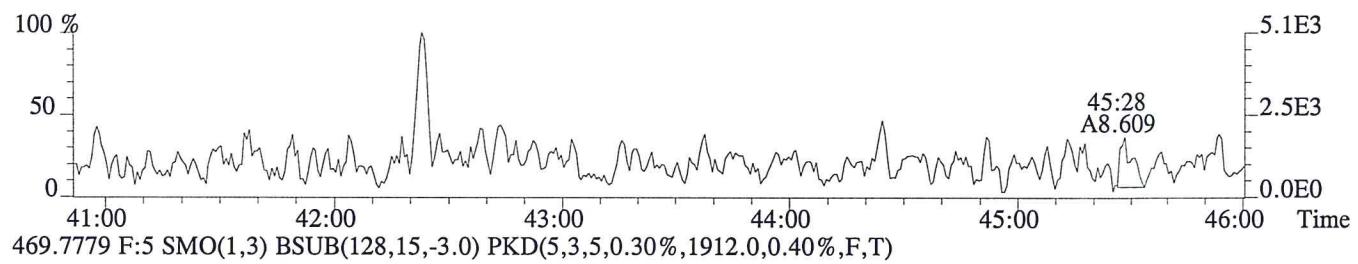
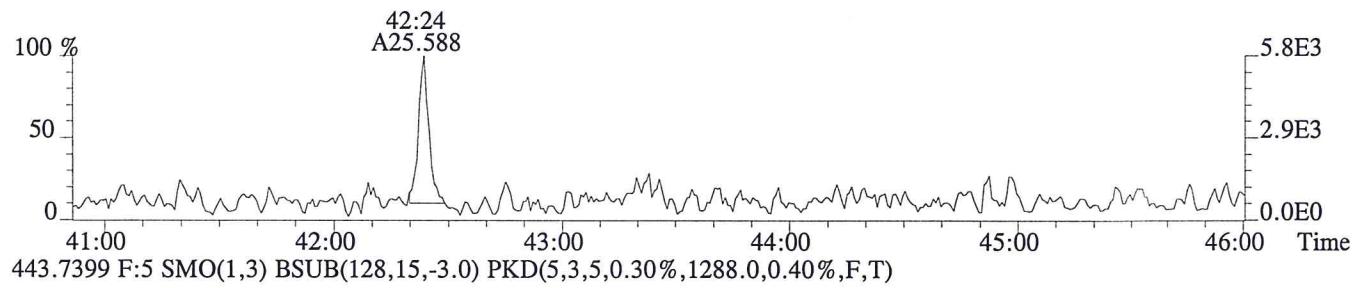
437.8140 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,2040.0,0.40%,F,T)



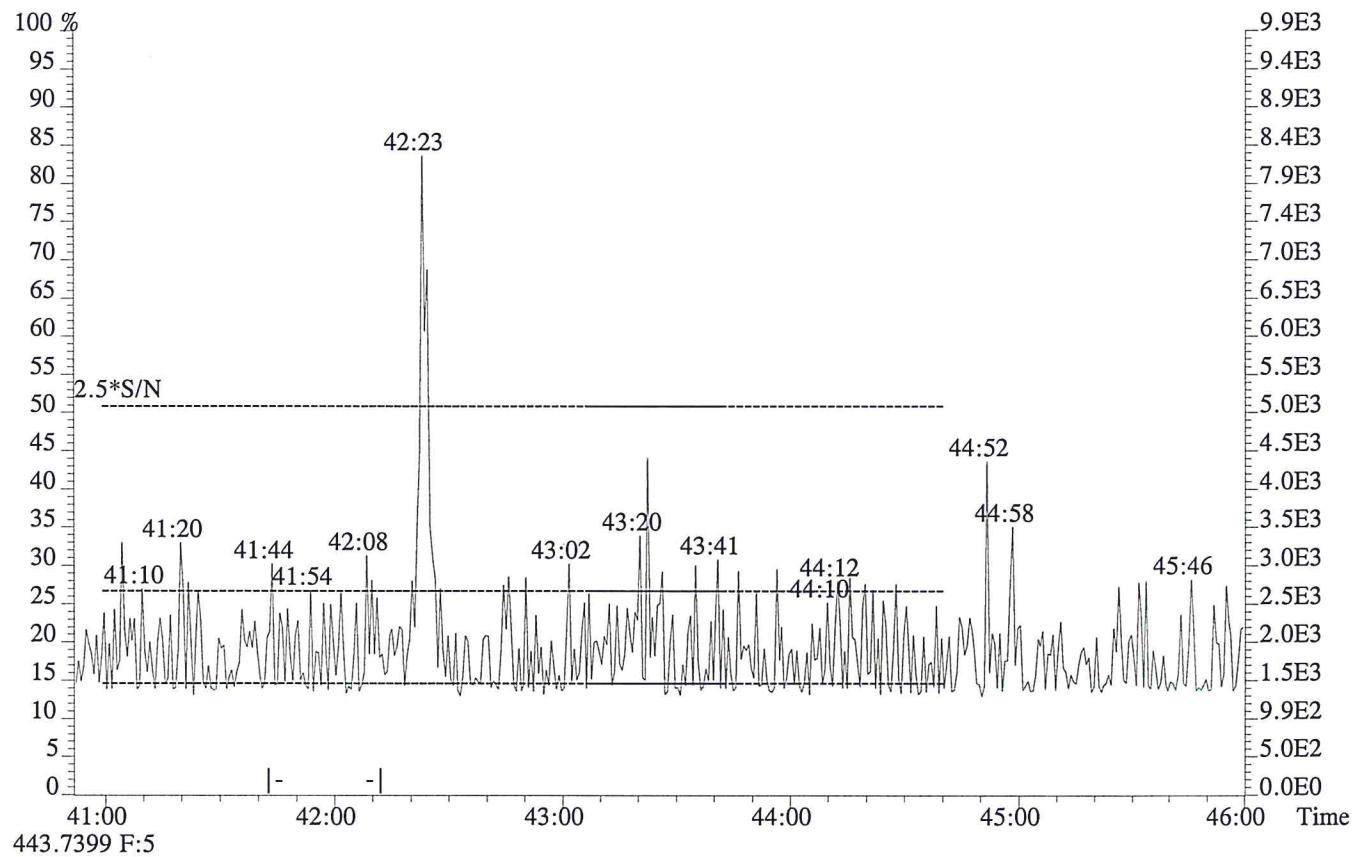
430.9729 F:4 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



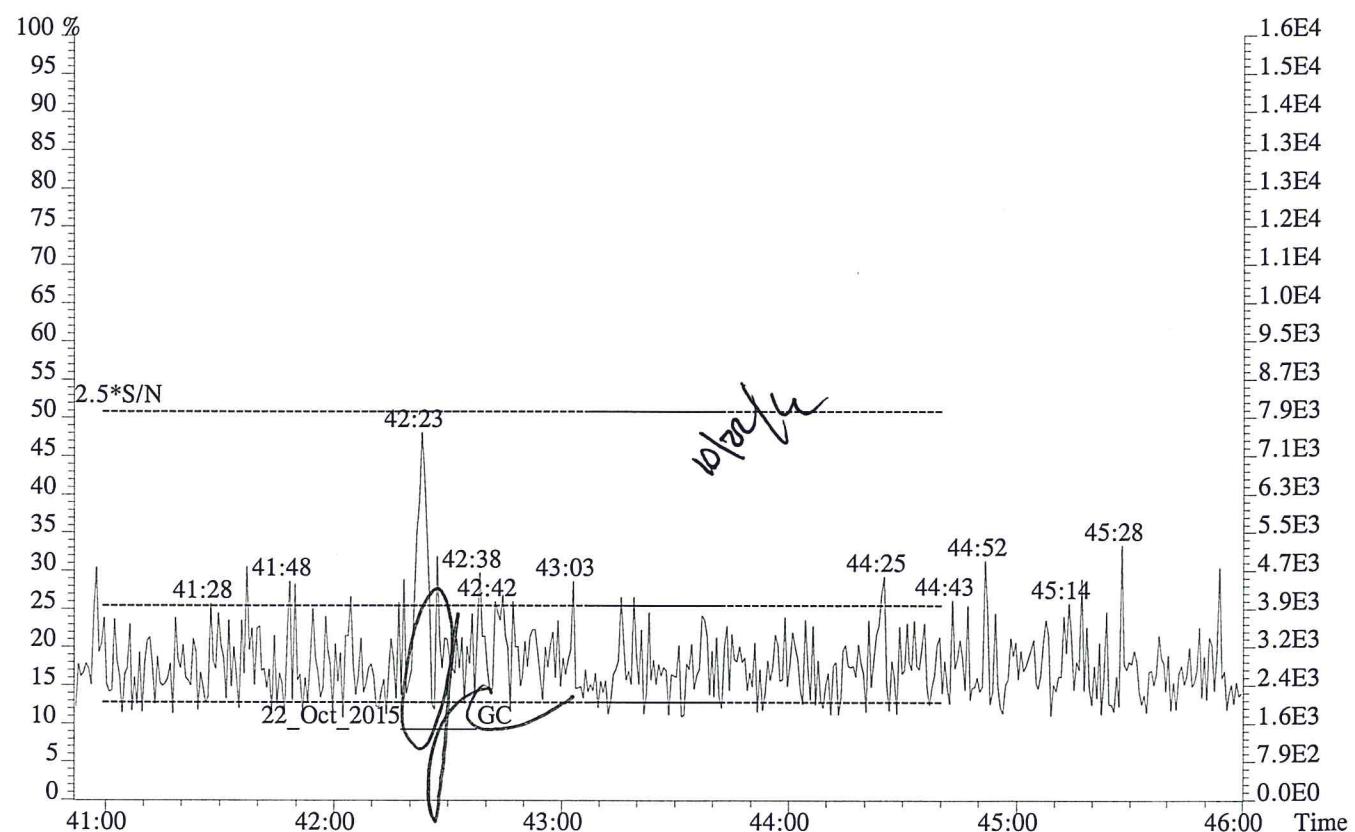
File:P600942 #1-464 Acq:13-OCT-2015 16:12:14 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:MB  
 441.7428 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,828.0,0.40%,F,T)



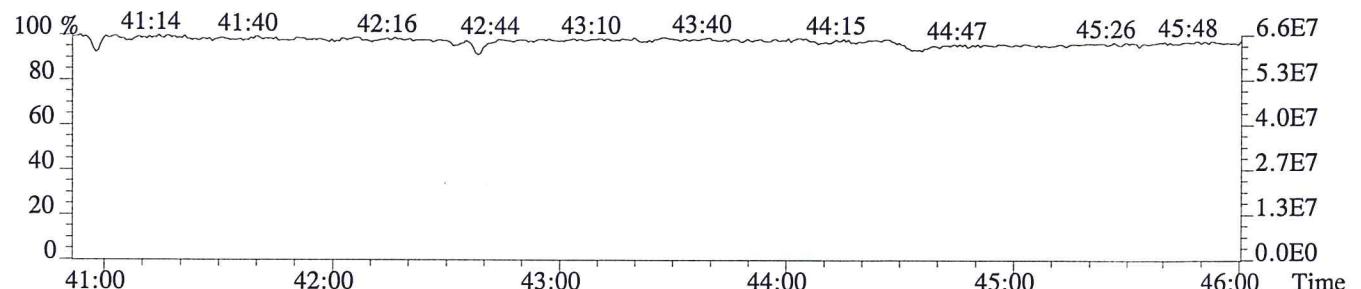
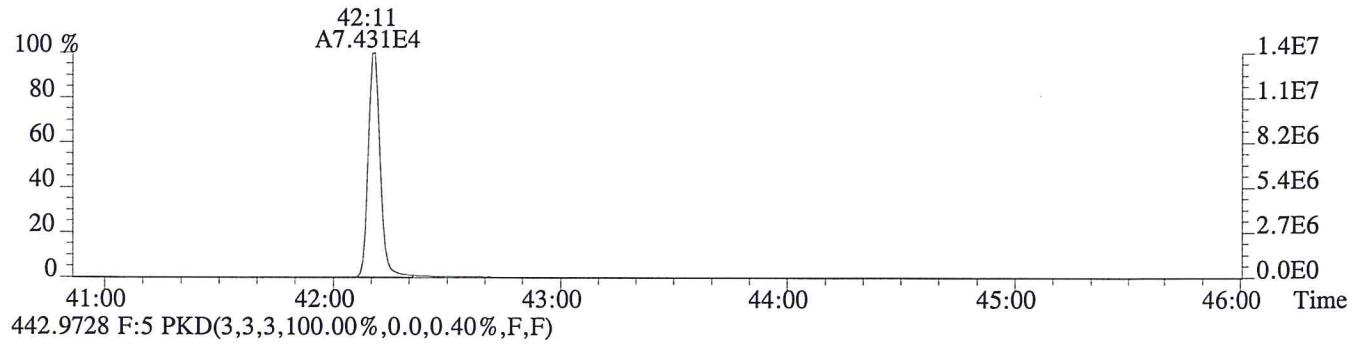
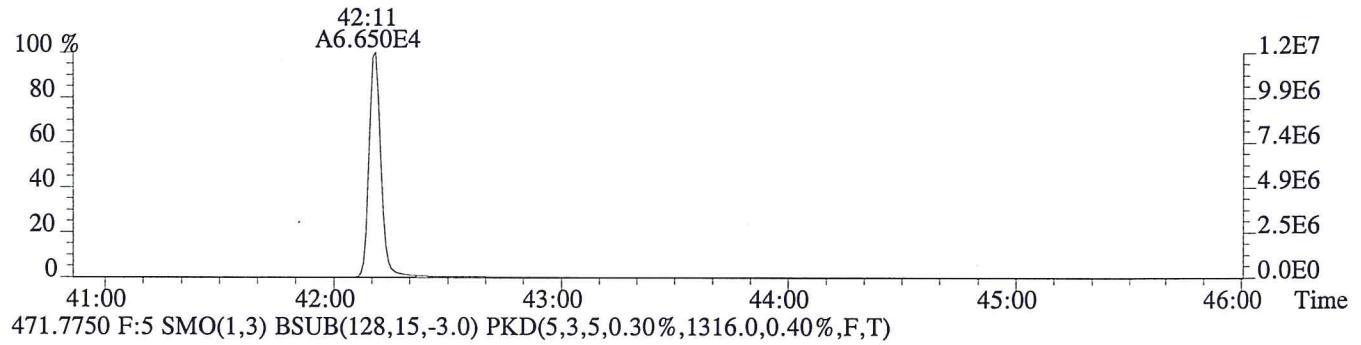
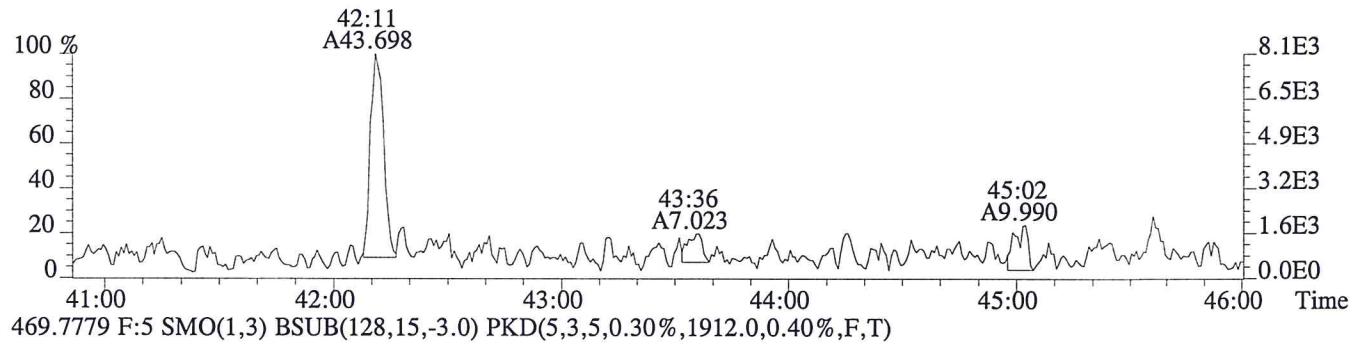
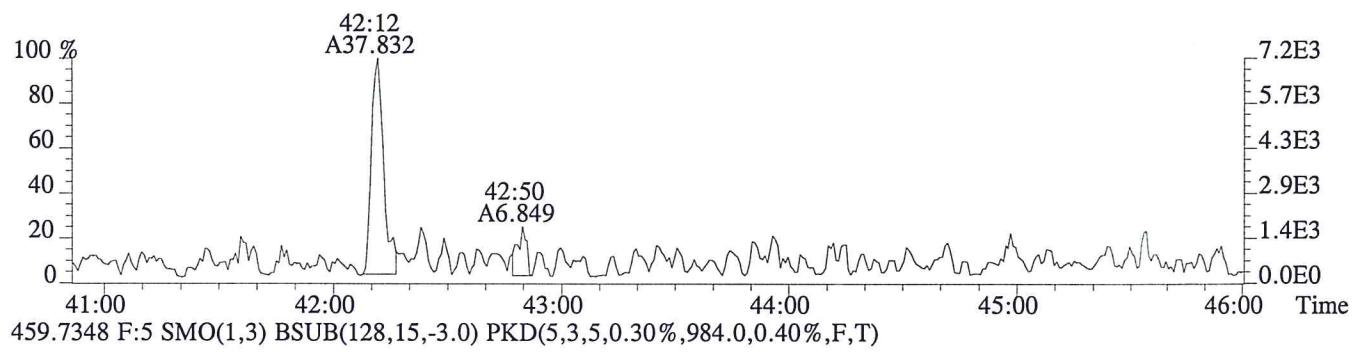
File:P600942 #1-464 Acq:13-OCT-2015 16:12:14 Probe EI+ Magnet SIR VG BioTech Mass spectf  
Sample#1 Exp:MB  
441.7428 F:5



443.7399 F:5



File:P600942 #1-464 Acq:13-OCT-2015 16:12:14 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:MB  
 457.7377 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,804.0,0.40%,F,T)



ALS ENVIRONMENTAL  
Sample Response Summary

CLIENT ID.  
LCS

Run #17    Filename P600966    Samp: 1    Inj: 1    Acquired: 14-OCT-15 11:56:44  
Processed: 21-OCT-15 15:49:52    Sample ID: EQ1500602-02

Typ	Name	RT-1	Resp 1	Resp 2	Ratio	Meet	Mod?	RRF
1 Unk	2,3,7,8-TCDF	28:10	2.326e+03	3.059e+03	0.76	yes	no	0.941
2 Unk	1,2,3,7,8-PeCDF	32:21	1.940e+04	1.252e+04	1.55	yes	no	0.987
3 Unk	2,3,4,7,8-PeCDF	33:16	1.953e+04	1.274e+04	1.53	yes	no	0.934
4 Unk	1,2,3,4,7,8-HxCDF	35:56	1.731e+04	1.413e+04	1.23	yes	no	1.189
5 Unk	1,2,3,6,7,8-HxCDF	36:02	1.846e+04	1.499e+04	1.23	yes	no	1.126
6 Unk	2,3,4,6,7,8-HxCDF	36:32	1.662e+04	1.382e+04	1.20	yes	no	1.116
7 Unk	1,2,3,7,8,9-HxCDF	37:17	1.384e+04	1.120e+04	1.24	yes	no	1.158
8 Unk	1,2,3,4,6,7,8-HpCDF	38:31	1.314e+04	1.271e+04	1.03	yes	no	1.373
9 Unk	1,2,3,4,7,8,9-HpCDF	39:55	1.121e+04	1.108e+04	1.01	yes	no	1.287
10 Unk	OCDF	42:22	1.817e+04	2.035e+04	0.89	yes	no	1.257
11 Unk	2,3,7,8-TCDD	28:56	1.897e+03	2.573e+03	0.74	yes	no	1.010
12 Unk	1,2,3,7,8-PeCDD	33:33	1.624e+04	1.025e+04	1.58	yes	no	0.932
13 Unk	1,2,3,4,7,8-HxCDD	36:40	1.420e+04	1.129e+04	1.26	yes	no	1.026
14 Unk	1,2,3,6,7,8-HxCDD	36:45	1.439e+04	1.130e+04	1.27	yes	no	1.021
15 Unk	1,2,3,7,8,9-HxCDD	36:59	1.435e+04	1.153e+04	1.24	yes	no	1.133
16 Unk	1,2,3,4,6,7,8-HpCDD	39:26	1.039e+04	1.005e+04	1.03	yes	no	1.034
17 Unk	OCDD	42:10	1.611e+04	1.825e+04	0.88	yes	no	1.111
18 IS	13C-2,3,7,8-TCDF	28:09	2.347e+04	3.023e+04	0.78	yes	no	1.379
19 IS	13C-1,2,3,7,8-PeCDF	32:21	3.930e+04	2.493e+04	1.58	yes	no	1.456
20 IS	13C-2,3,4,7,8-PeCDF	33:15	3.851e+04	2.482e+04	1.55	yes	no	1.465
21 IS	13C-1,2,3,4,7,8-HxCDF	35:55	1.657e+04	3.225e+04	0.51	yes	no	1.075
22 IS	13C-1,2,3,6,7,8-HxCDF	36:02	1.894e+04	3.730e+04	0.51	yes	no	1.158
23 IS	13C-2,3,4,6,7,8-HxCDF	36:32	1.727e+04	3.345e+04	0.52	yes	no	1.133
24 IS	13C-1,2,3,7,8,9-HxCDF	37:16	1.447e+04	2.797e+04	0.52	yes	no	1.024
25 IS	13C-1,2,3,4,6,7,8-HpCDF	38:31	1.049e+04	2.444e+04	0.43	yes	no	0.880
26 IS	13C-1,2,3,4,7,8,9-HpCDF	39:54	9.883e+03	2.299e+04	0.43	yes	no	0.914
27 IS	13C-2,3,7,8-TCDD	28:55	1.769e+04	2.230e+04	0.79	yes	no	1.193
28 IS	13C-1,2,3,7,8-PeCDD	33:31	2.940e+04	1.857e+04	1.58	yes	no	1.094
29 IS	13C-1,2,3,4,7,8-HxCDD	36:39	2.459e+04	1.970e+04	1.25	yes	no	0.906
30 IS	13C-1,2,3,6,7,8-HxCDD	36:44	2.568e+04	2.024e+04	1.27	yes	no	0.860
31 IS	13C-1,2,3,4,6,7,8-HpCDD	39:25	1.963e+04	1.829e+04	1.07	yes	no	0.892
32 IS	13C-OCDD	42:10	2.640e+04	2.972e+04	0.89	yes	no	0.642
33 RS/RT	13C-1,2,3,4-TCDD	28:21	2.419e+04	2.971e+04	0.81	yes	no	-
34 RS/RT	13C-1,2,3,7,8,9-HxCDD	36:58	3.387e+04	2.585e+04	1.31	yes	no	-
35 C/Up	37Cl-2,3,7,8-TCDD	28:56	1.835e+04				no	1.263

$$(1.611e+04 + 1.825e+04) \times 4000 \text{ pg} \times 1$$

OCDD =----- =  

$$(2.640e+04 + 2.972e+04) \times \text{g} \times / 100 \times 1.111$$

---

ALS ENVIRONMENTAL -- HOUSTON HRMS  
10450 Stancliff Rd., Suite 115

Houston, TX 77099

Telephone: (713) 266-1599. Fax(713) 266-0130

ALS ENVIRONMENTAL  
Signal/Noise Height Ratio Summary

CLIENT ID.  
LCS

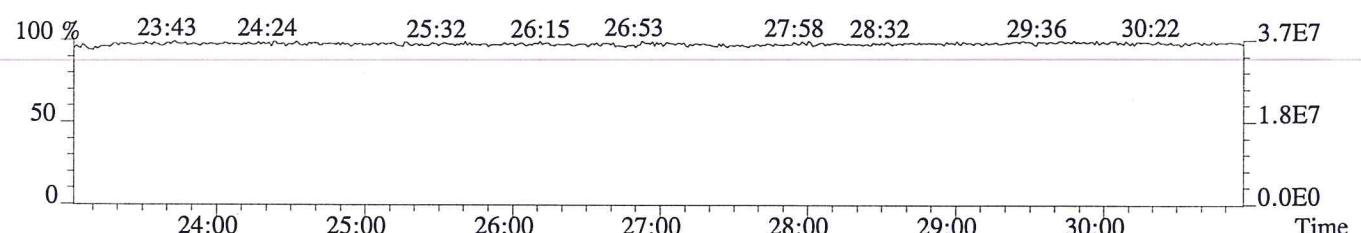
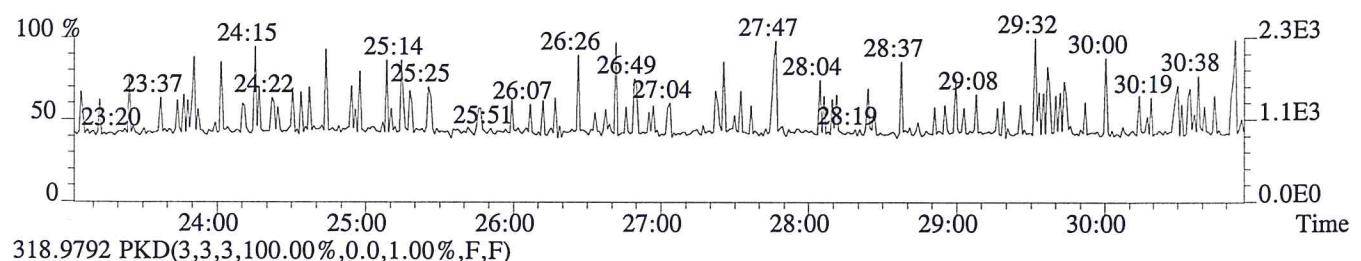
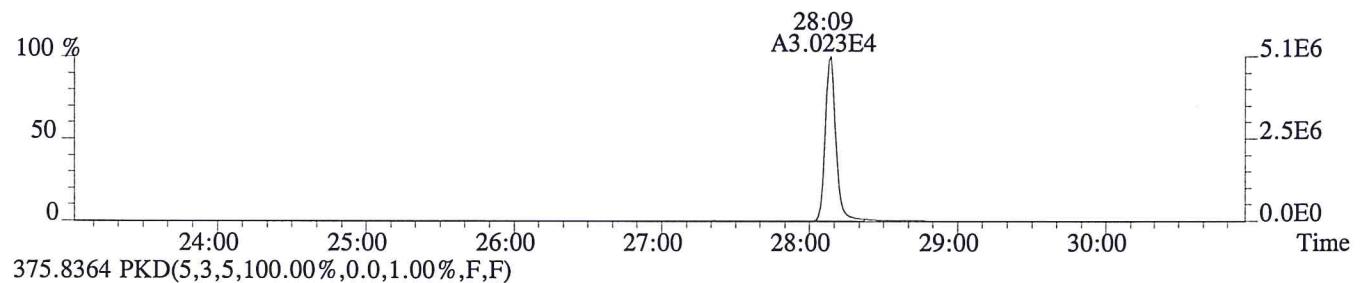
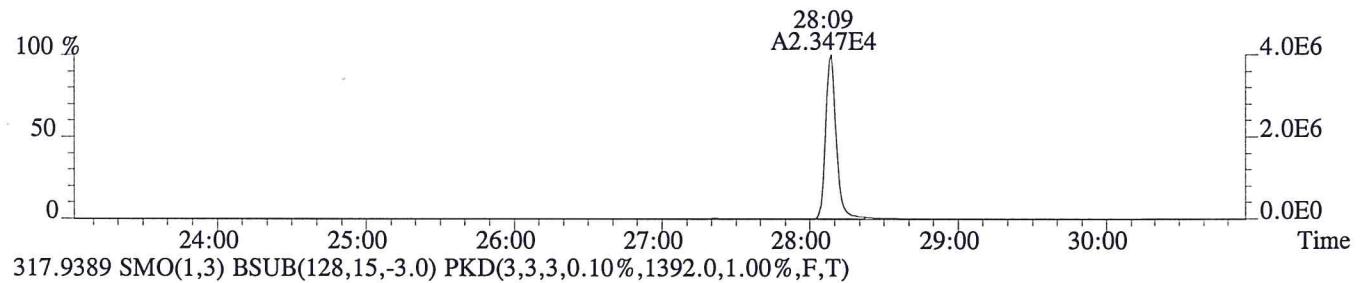
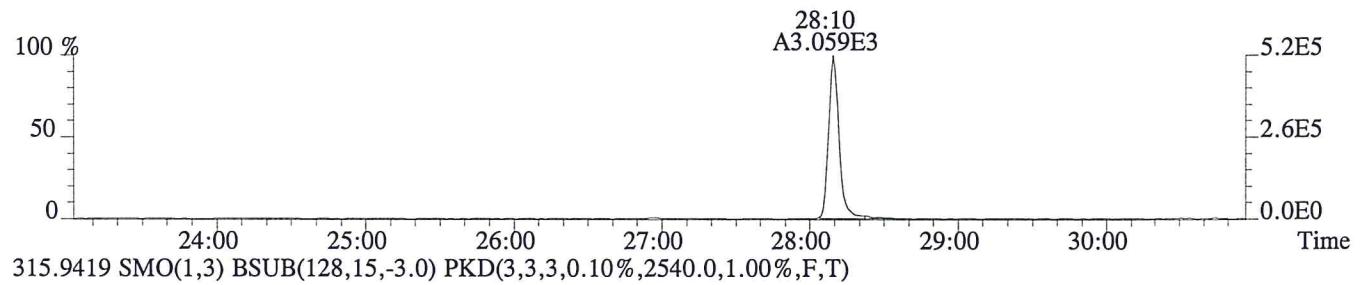
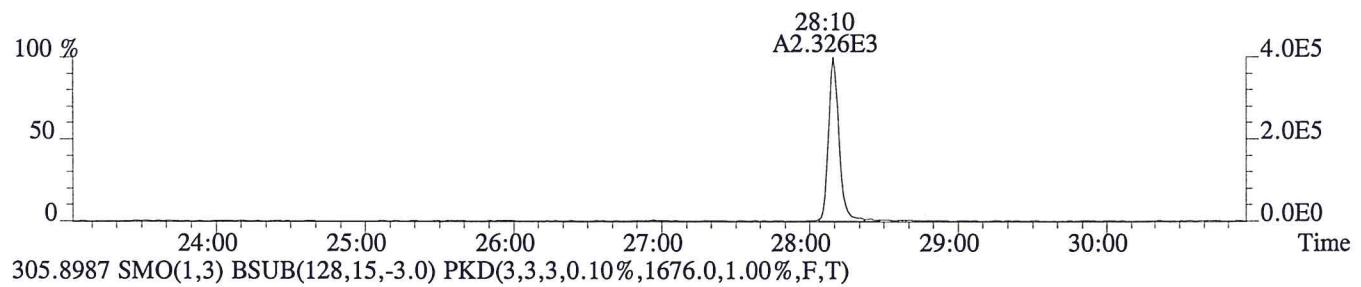
Run #17   Filename P600966              Samp: 1    Inj: 1    Acquired: 14-OCT-15 11:56:44  
Processed: 21-OCT-15 15:49:52              LAB. ID: EQ1500602-02

	Name	Signal 1	Noise 1	S/N Rat.1	Signal 2	Noise 2	S/N Rat.2
1	2,3,7,8-TCDF	3.98e+05	6.72e+02	5.9e+02	5.23e+05	1.68e+03	3.1e+02
2	1,2,3,7,8-PeCDF	3.58e+06	9.40e+02	3.8e+03	2.30e+06	2.73e+03	8.4e+02
3	2,3,4,7,8-PeCDF	3.65e+06	9.40e+02	3.9e+03	2.40e+06	2.73e+03	8.8e+02
4	1,2,3,4,7,8-HxCDF	3.82e+06	1.42e+03	2.7e+03	3.11e+06	6.56e+02	4.7e+03
5	1,2,3,6,7,8-HxCDF	3.79e+06	1.42e+03	2.7e+03	3.03e+06	6.56e+02	4.6e+03
6	2,3,4,6,7,8-HxCDF	3.70e+06	1.42e+03	2.6e+03	3.02e+06	6.56e+02	4.6e+03
7	1,2,3,7,8,9-HxCDF	2.82e+06	1.42e+03	2.0e+03	2.30e+06	6.56e+02	3.5e+03
8	1,2,3,4,6,7,8-HpCDF	2.90e+06	1.80e+03	1.6e+03	2.83e+06	1.14e+03	2.5e+03
9	1,2,3,4,7,8,9-HpCDF	2.21e+06	1.80e+03	1.2e+03	2.19e+06	1.14e+03	1.9e+03
10	OCDF	3.30e+06	6.00e+02	5.5e+03	3.70e+06	1.26e+03	2.9e+03
11	2,3,7,8-TCDD	3.34e+05	1.08e+03	3.1e+02	4.69e+05	1.11e+03	4.2e+02
12	1,2,3,7,8-PeCDD	3.12e+06	2.12e+03	1.5e+03	1.94e+06	1.70e+03	1.1e+03
13	1,2,3,4,7,8-HxCDD	3.28e+06	2.30e+03	1.4e+03	2.60e+06	1.55e+03	1.7e+03
14	1,2,3,6,7,8-HxCDD	3.09e+06	2.30e+03	1.3e+03	2.41e+06	1.55e+03	1.6e+03
15	1,2,3,7,8,9-HxCDD	2.99e+06	2.30e+03	1.3e+03	2.44e+06	1.55e+03	1.6e+03
16	1,2,3,4,6,7,8-HpCDD	2.21e+06	1.08e+03	2.0e+03	2.14e+06	1.12e+03	1.9e+03
17	OCDD	2.98e+06	5.32e+02	5.6e+03	3.40e+06	7.64e+02	4.5e+03
18	13C-2,3,7,8-TCDF	3.97e+06	2.54e+03	1.6e+03	5.08e+06	1.39e+03	3.7e+03
19	13C-1,2,3,7,8-PeCDF	7.28e+06	6.52e+02	1.1e+04	4.55e+06	6.80e+02	6.7e+03
20	13C-2,3,4,7,8-PeCDF	7.44e+06	6.52e+02	1.1e+04	4.83e+06	6.80e+02	7.1e+03
21	13C-1,2,3,4,7,8-HxCDF	3.61e+06	1.32e+03	2.7e+03	7.04e+06	1.80e+03	3.9e+03
22	13C-1,2,3,6,7,8-HxCDF	3.89e+06	1.32e+03	3.0e+03	7.57e+06	1.80e+03	4.2e+03
23	13C-2,3,4,6,7,8-HxCDF	3.81e+06	1.32e+03	2.9e+03	7.29e+06	1.80e+03	4.1e+03
24	13C-1,2,3,7,8,9-HxCDF	2.98e+06	1.32e+03	2.3e+03	5.83e+06	1.80e+03	3.2e+03
25	13C-1,2,3,4,6,7,8-HpCDF	2.27e+06	2.83e+03	8.0e+02	5.36e+06	1.90e+03	2.8e+03
26	13C-1,2,3,4,7,8,9-HpCDF	1.96e+06	2.83e+03	6.9e+02	4.54e+06	1.90e+03	2.4e+03
27	13C-2,3,7,8-TCDD	3.22e+06	3.95e+03	8.1e+02	4.09e+06	2.45e+03	1.7e+03
28	13C-1,2,3,7,8-PeCDD	5.74e+06	1.29e+03	4.5e+03	3.66e+06	6.48e+02	5.6e+03
29	13C-1,2,3,4,7,8-HxCDD	5.65e+06	2.52e+03	2.2e+03	4.51e+06	2.54e+03	1.8e+03
30	13C-1,2,3,6,7,8-HxCDD	5.49e+06	2.52e+03	2.2e+03	4.29e+06	2.54e+03	1.7e+03
31	13C-1,2,3,4,6,7,8-HpCDD	4.17e+06	1.68e+03	2.5e+03	3.91e+06	2.01e+03	1.9e+03
32	13C-OCDD	4.95e+06	1.21e+03	4.1e+03	5.57e+06	1.51e+03	3.7e+03
33	13C-1,2,3,4-TCDD	4.38e+06	3.95e+03	1.1e+03	5.45e+06	2.45e+03	2.2e+03
34	13C-1,2,3,7,8,9-HxCDD	7.10e+06	2.52e+03	2.8e+03	5.61e+06	2.54e+03	2.2e+03
35	37Cl-2,3,7,8-TCDD	3.37e+06	1.42e+03	2.4e+03			

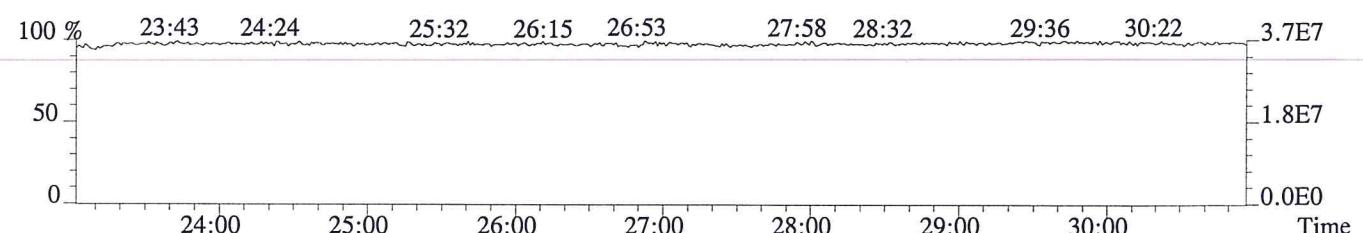
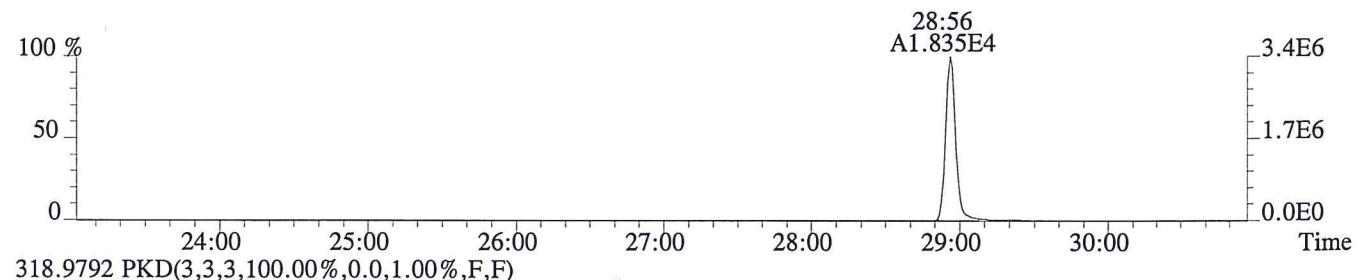
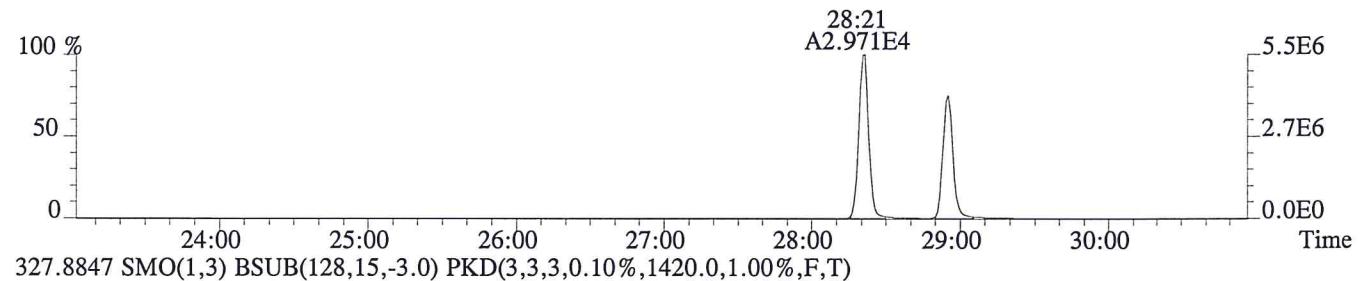
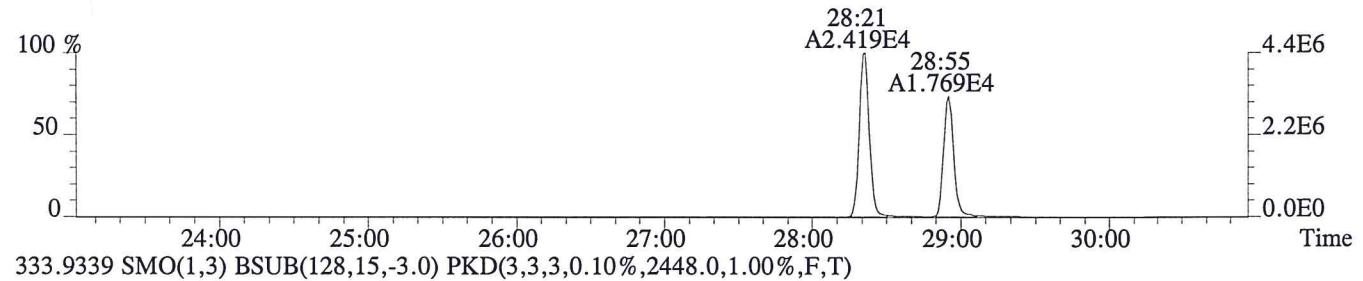
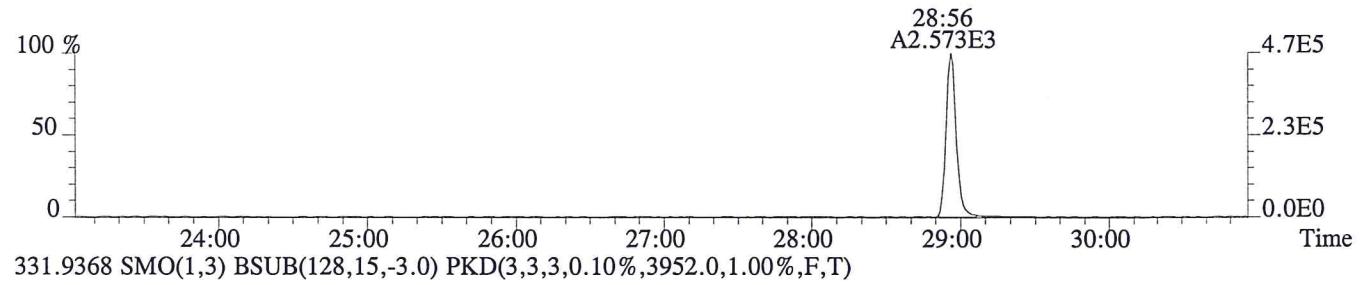
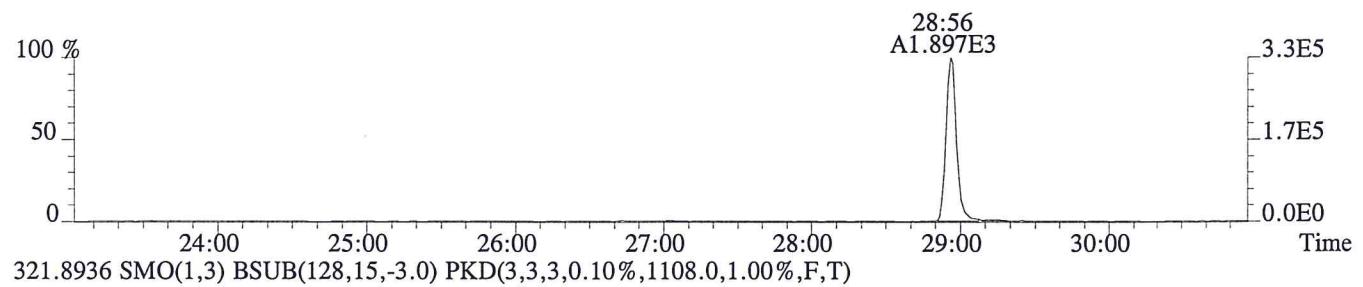
---

ALS ENVIRONMENTAL  
10450 Stancliff Rd., Suite 115  
Houston, TX 77099  
Office: (713) 266-1599. Fax: (713) 266-0130

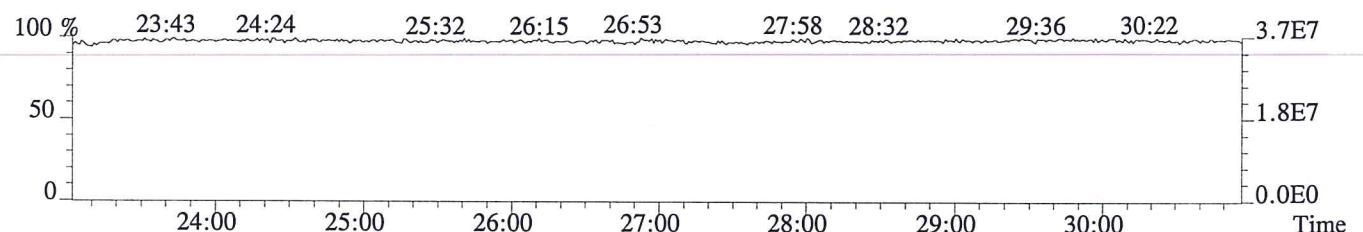
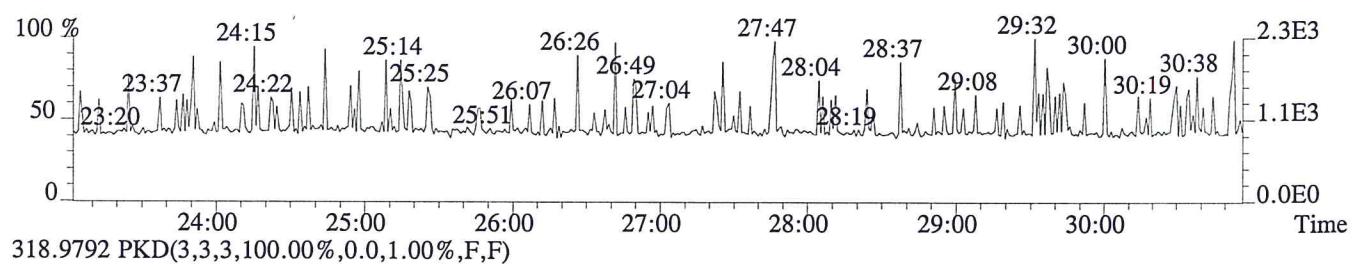
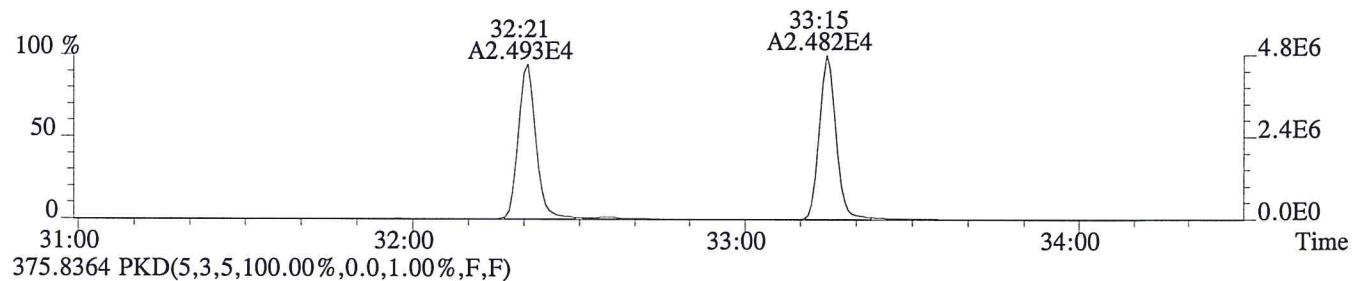
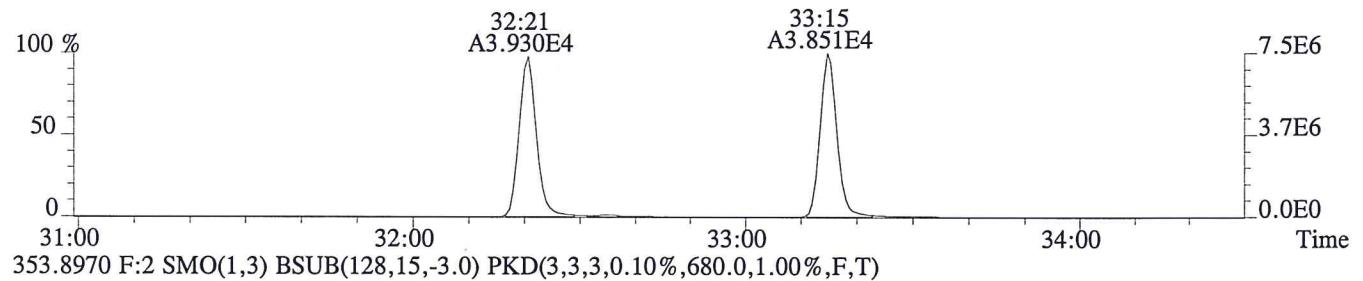
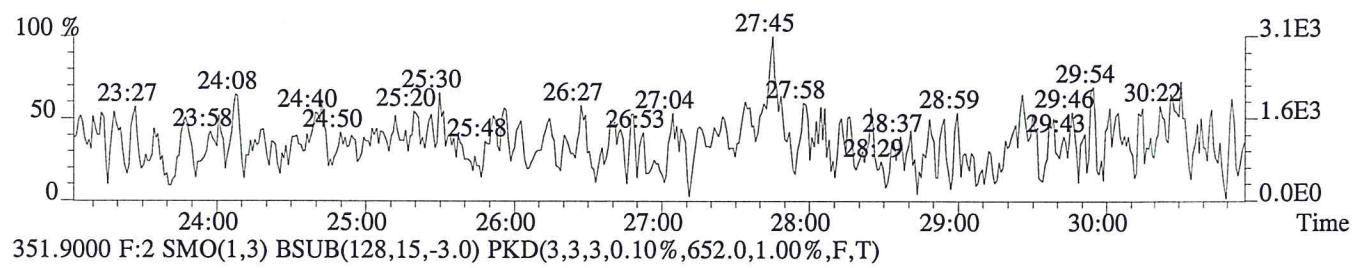
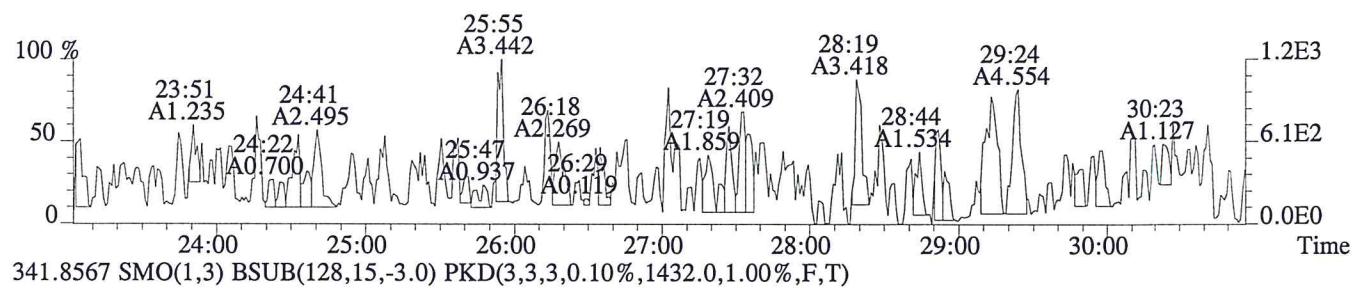
File:P600966 #1-562 Acq:14-OCT-2015 11:56:44 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:EQ1500602-02  
 303.9016 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,672.0,1.00%,F,T)



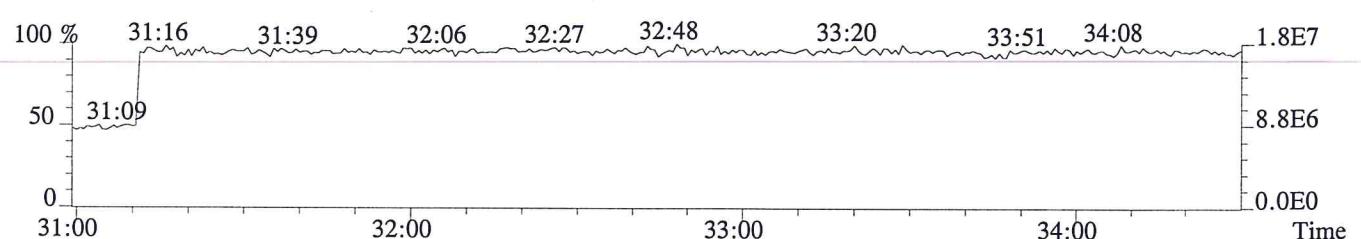
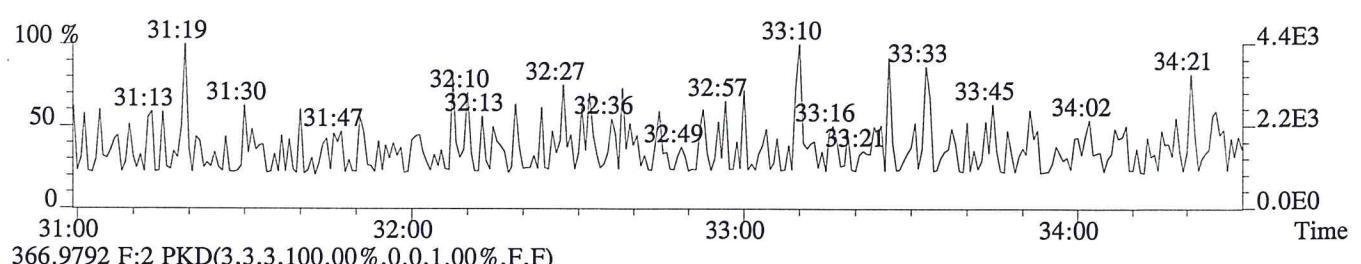
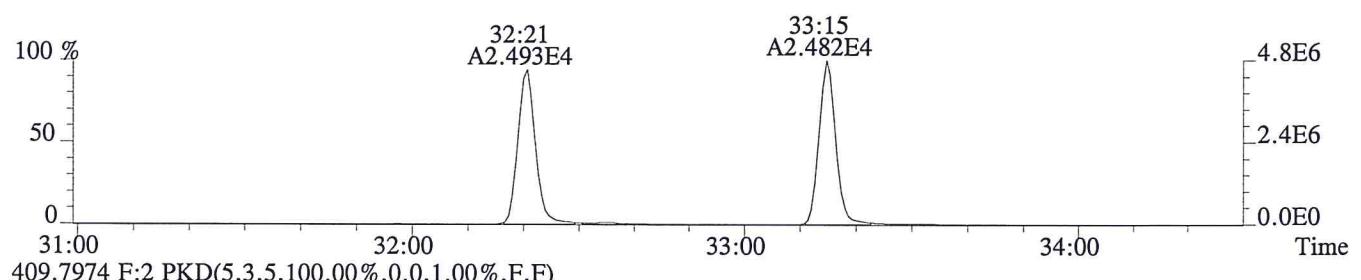
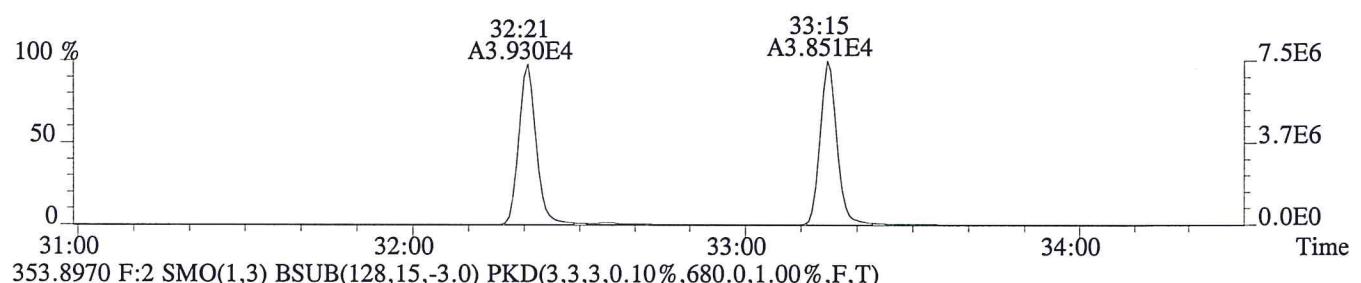
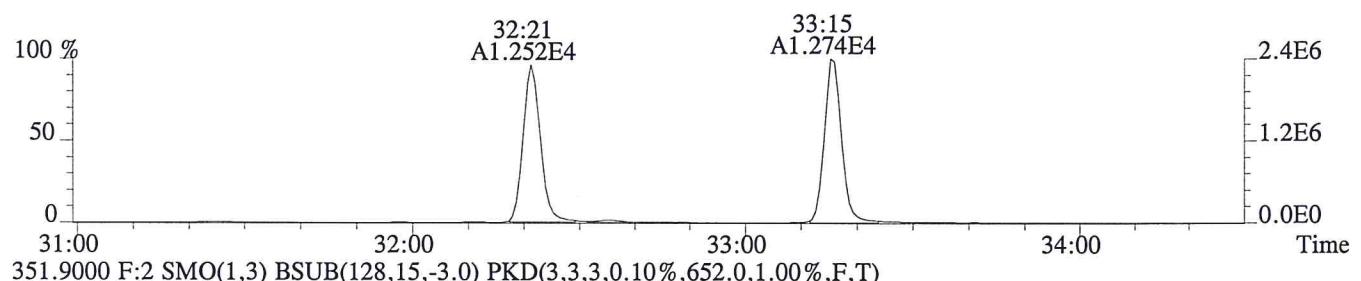
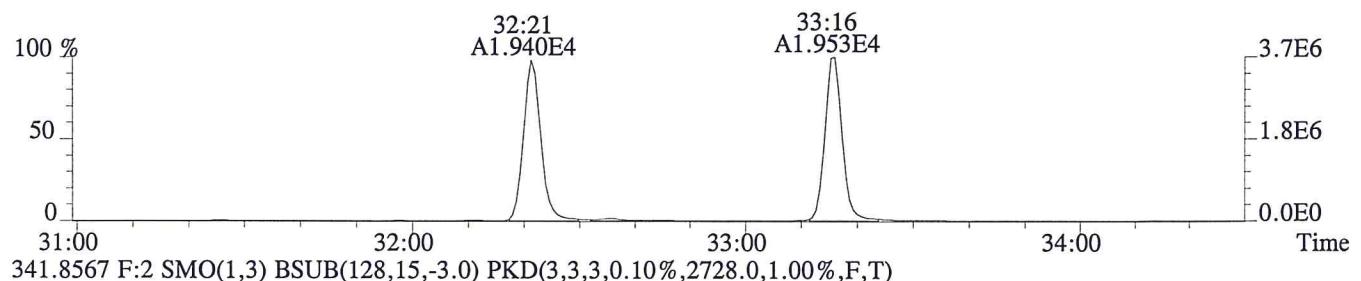
File:P600966 #1-562 Acq:14-OCT-2015 11:56:44 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:EQ1500602-02  
 319.8965 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1084.0,1.00%,F,T)



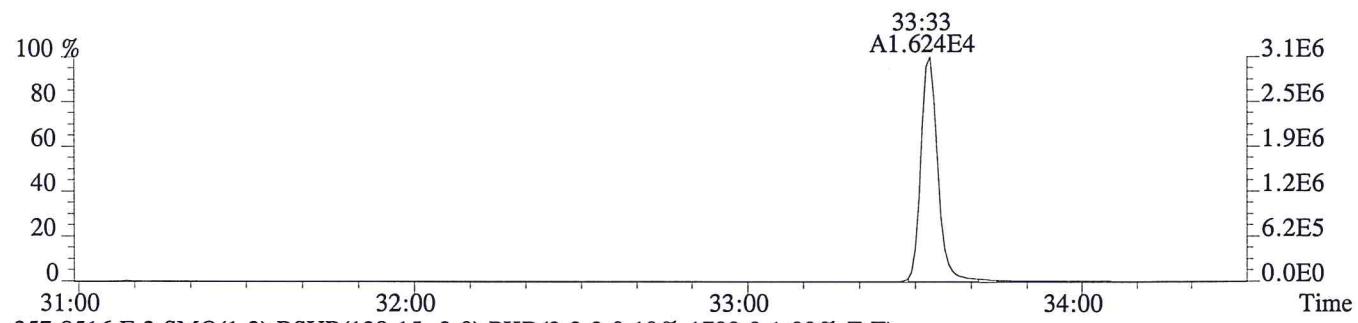
File:P600966 #1-562 Acq:14-OCT-2015 11:56:44 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:EQ1500602-02  
 339.8597 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,320.0,1.00%,F,T)



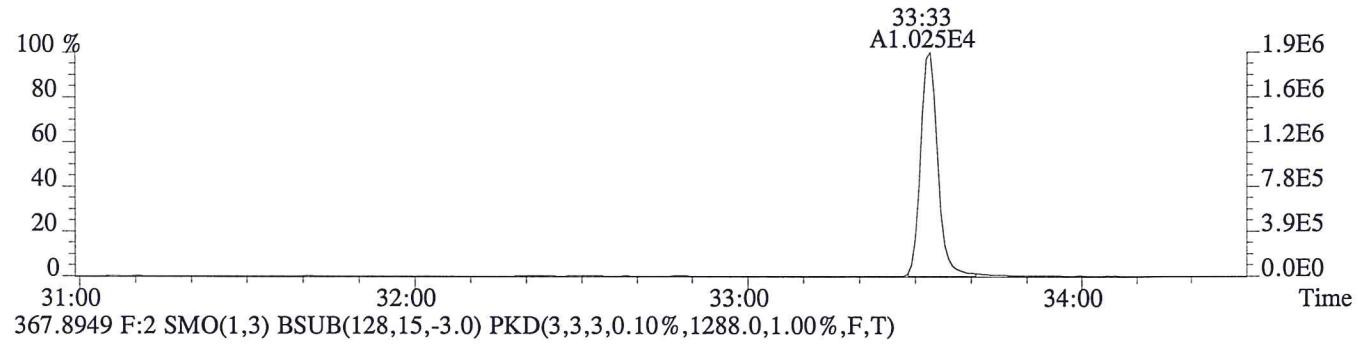
File:P600966 #1-317 Acq:14-OCT-2015 11:56:44 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:EQ1500602-02  
 339.8597 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,940.0,1.00%,F,T)



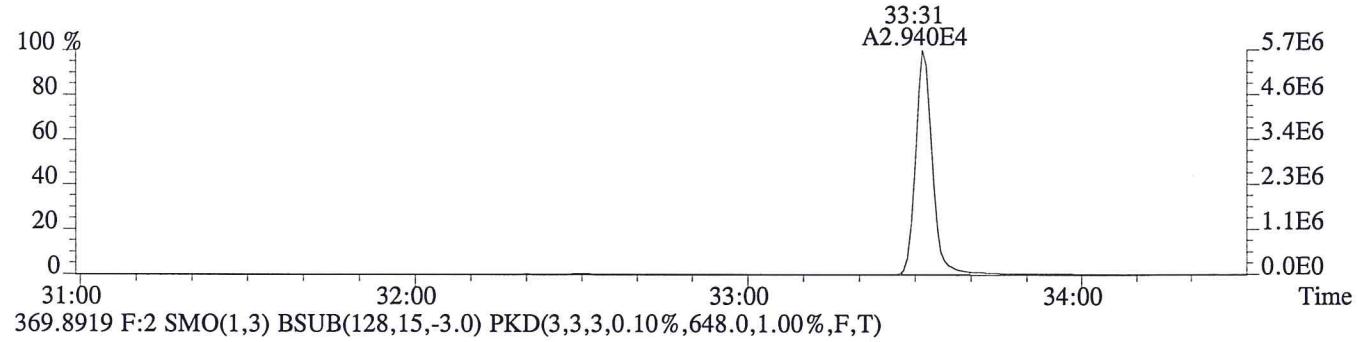
File:P600966 #1-317 Acq:14-OCT-2015 11:56:44 Probe EI+ Magnet SIR VG BioTech Mass spectf  
Sample#1 Exp:EQ1500602-02  
355.8546 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,2116.0,1.00%,F,T)



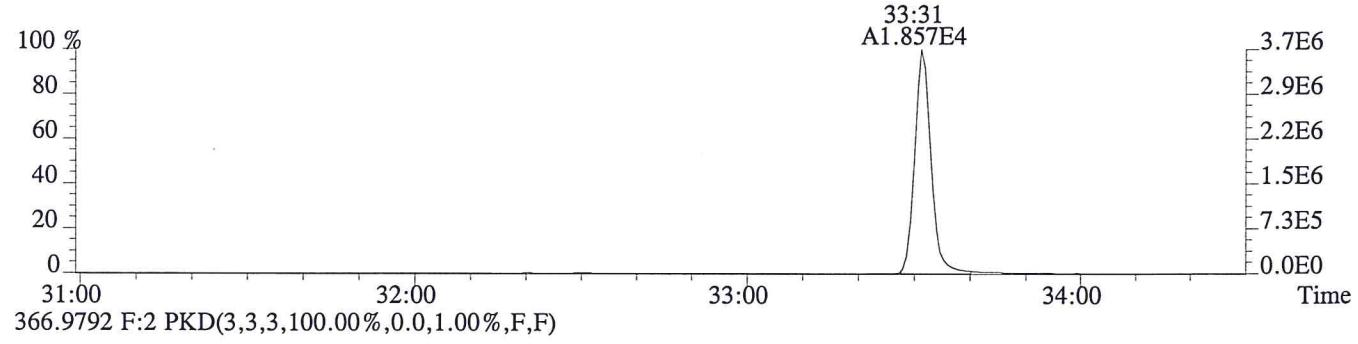
357.8516 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1700.0,1.00%,F,T)



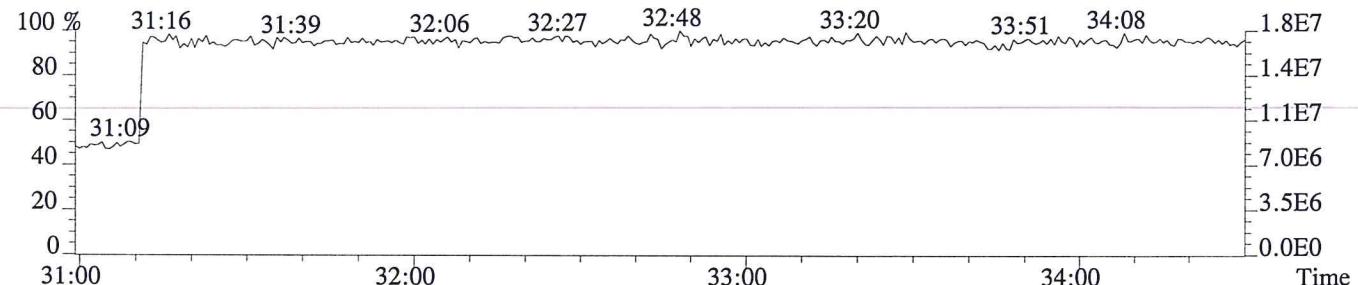
367.8949 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1288.0,1.00%,F,T)



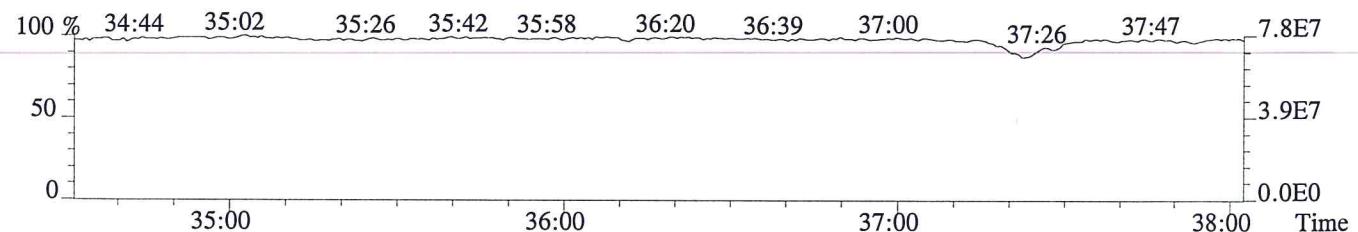
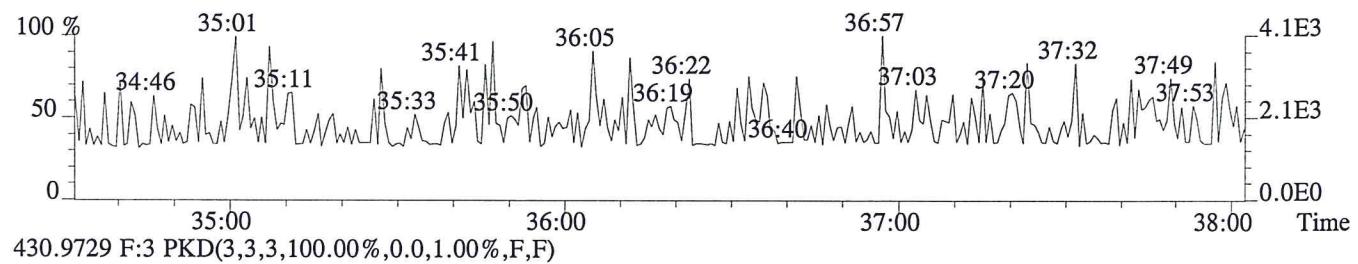
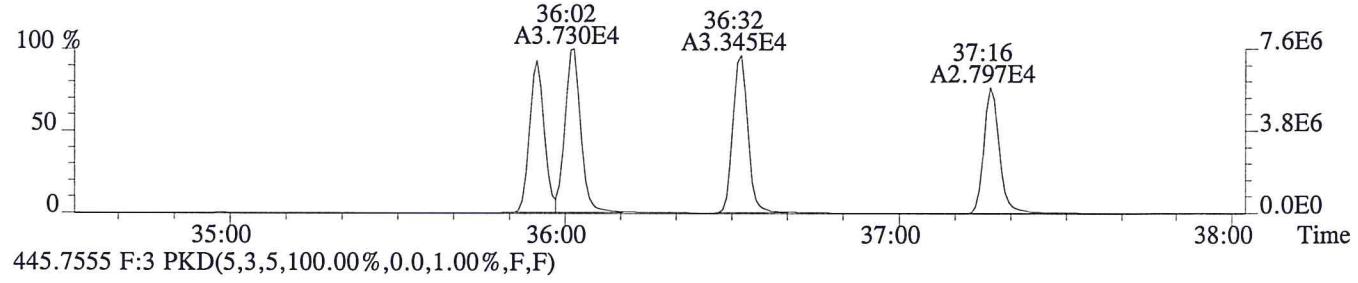
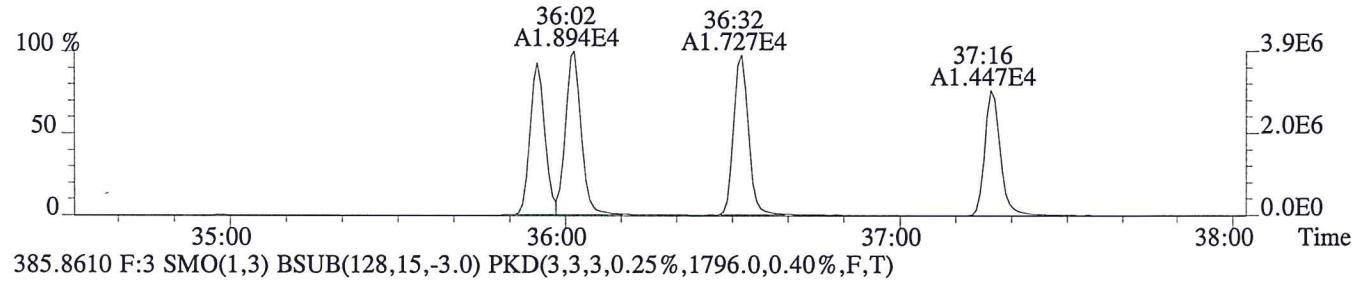
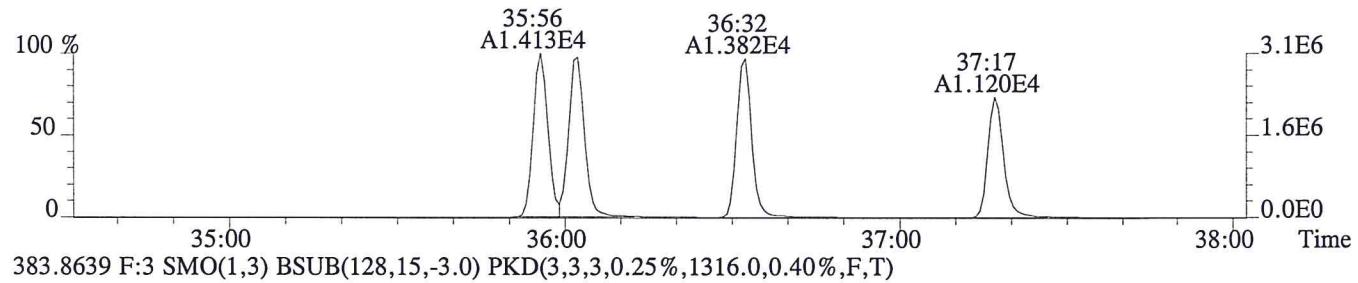
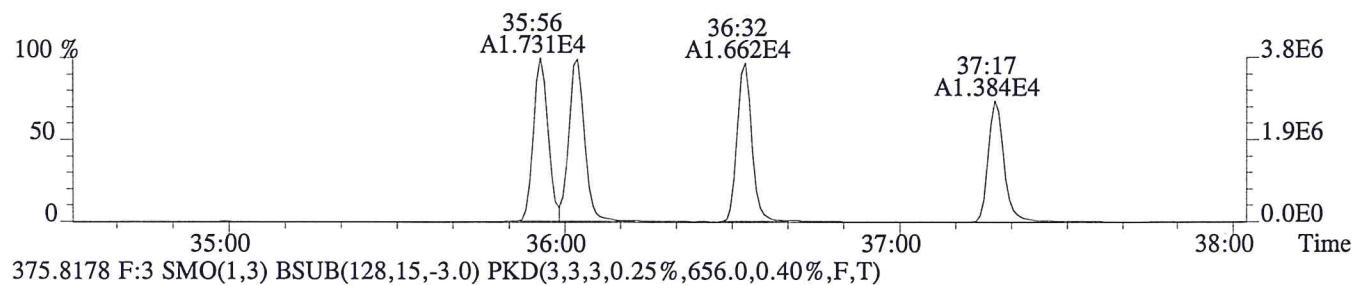
369.8919 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,648.0,1.00%,F,T)



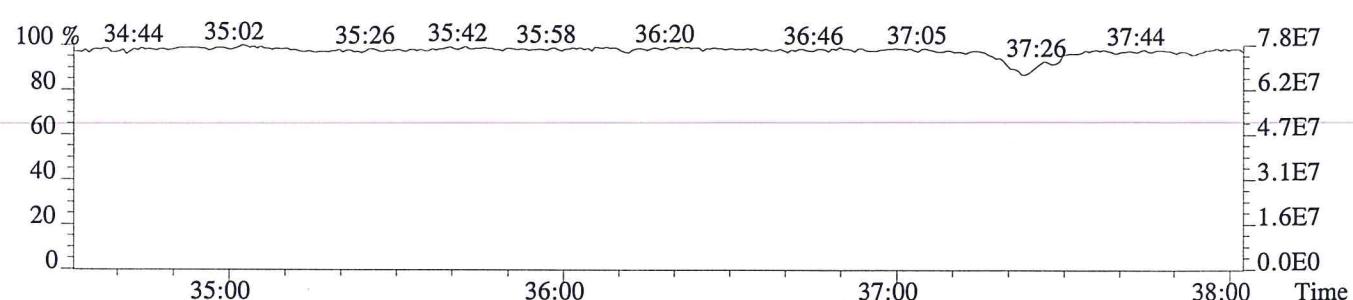
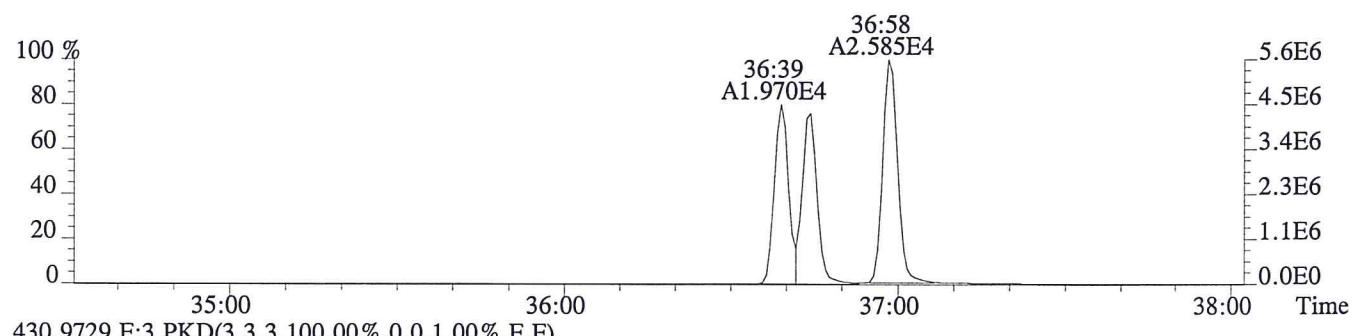
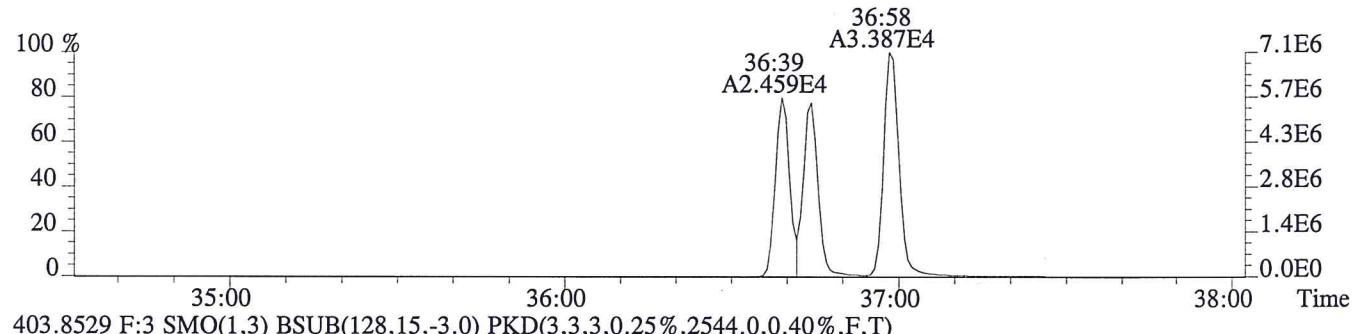
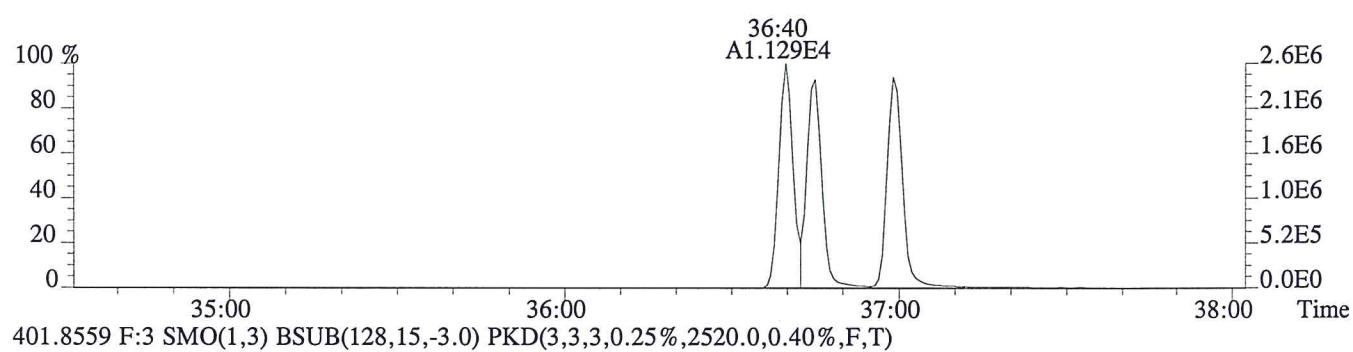
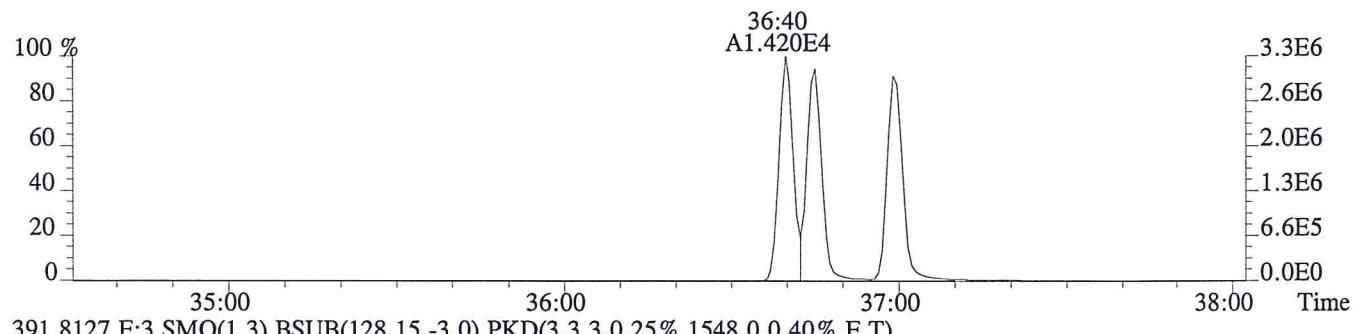
366.9792 F:2 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



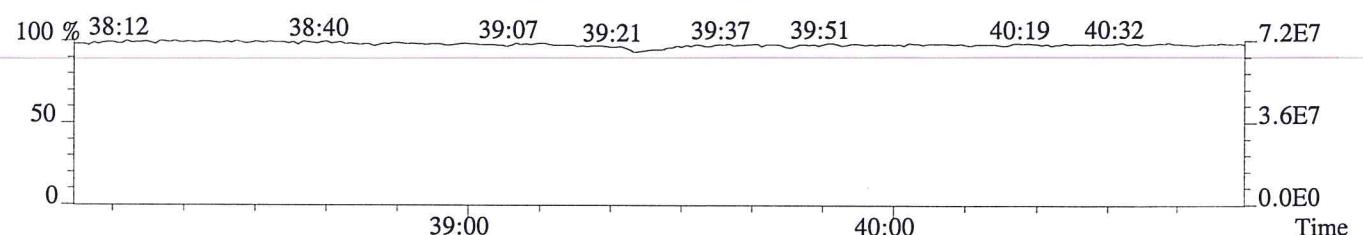
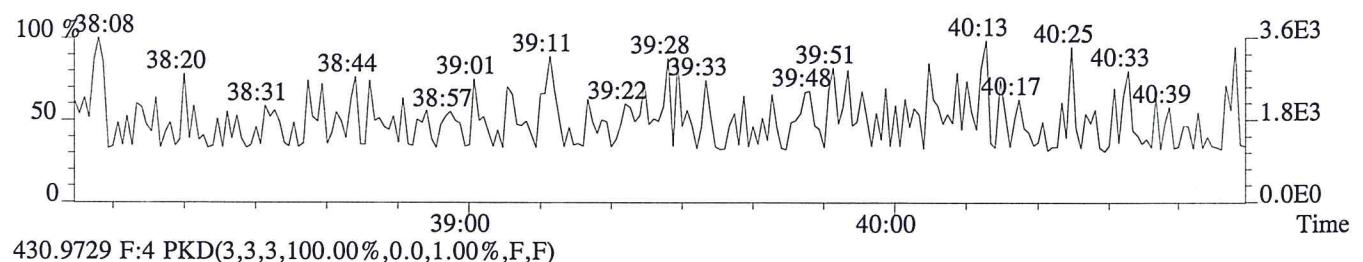
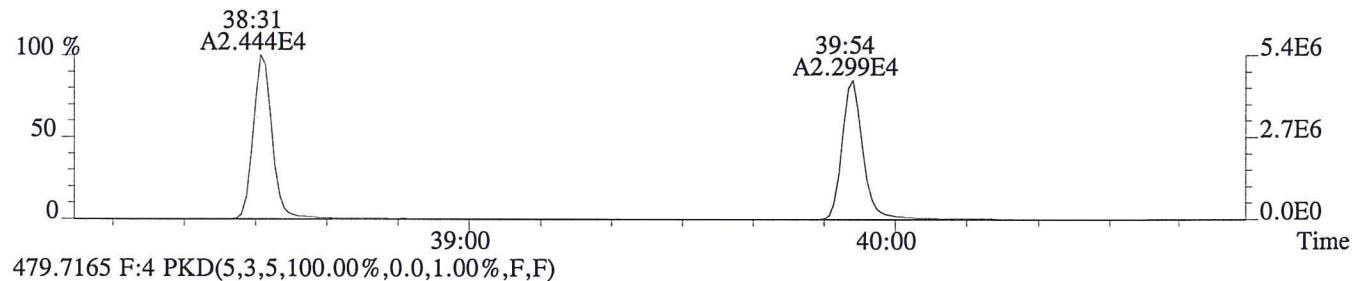
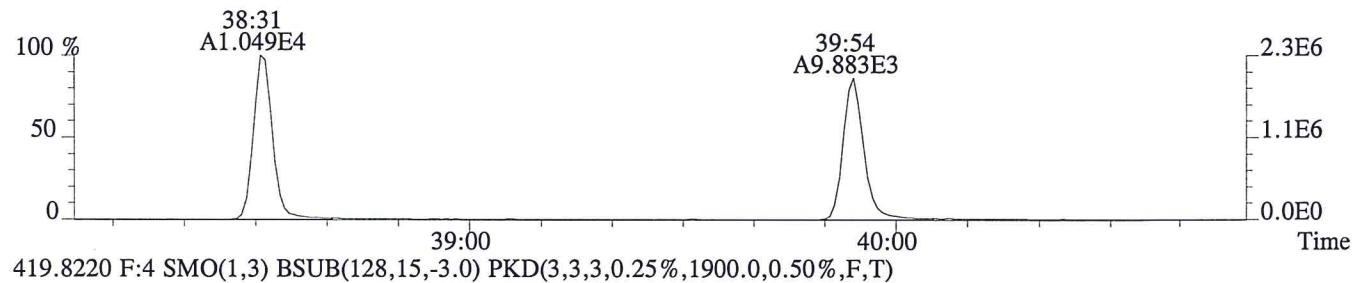
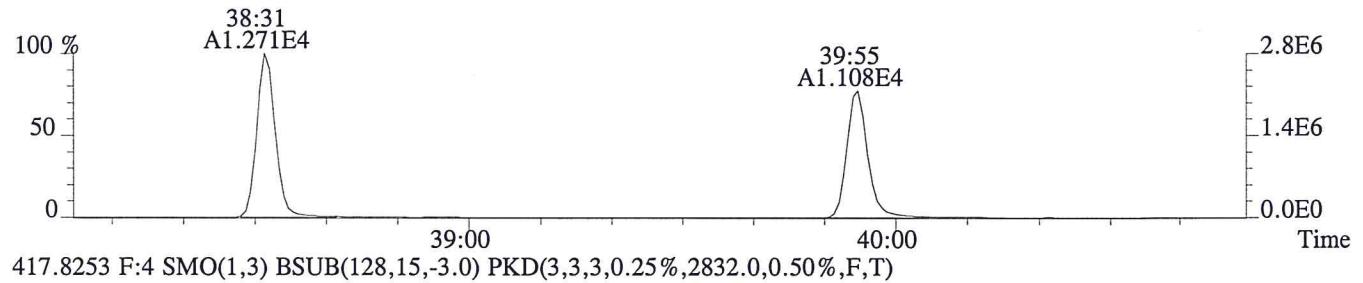
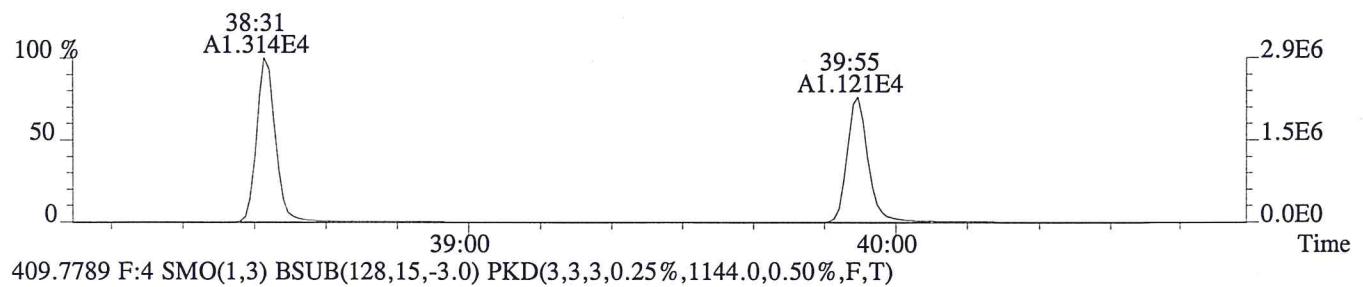
File:P600966 #1-316 Acq:14-OCT-2015 11:56:44 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:EQ1500602-02  
 373.8208 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1420.0,0.40%,F,T)



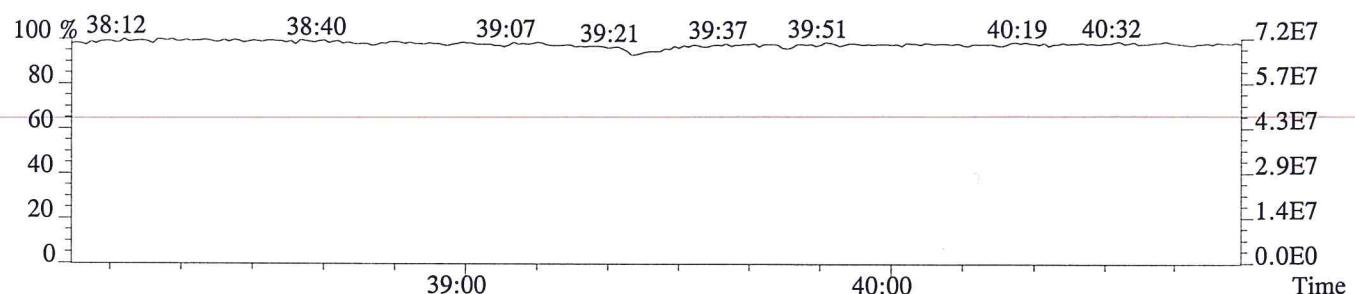
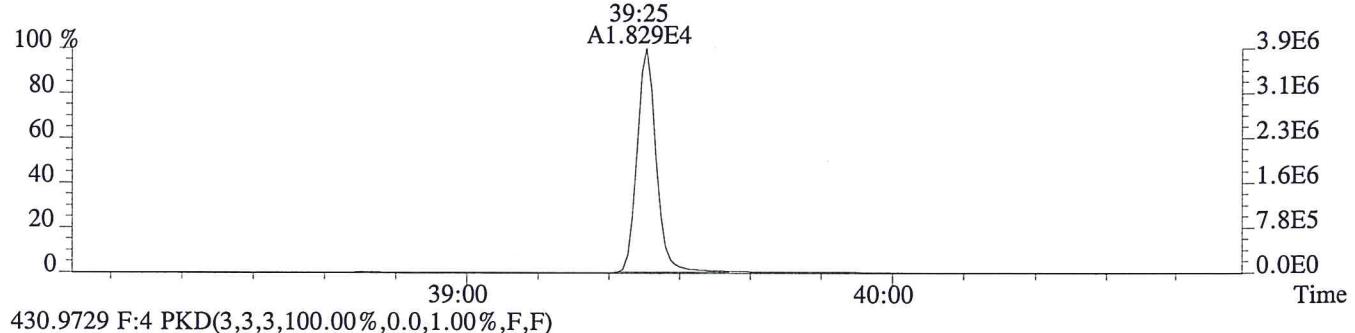
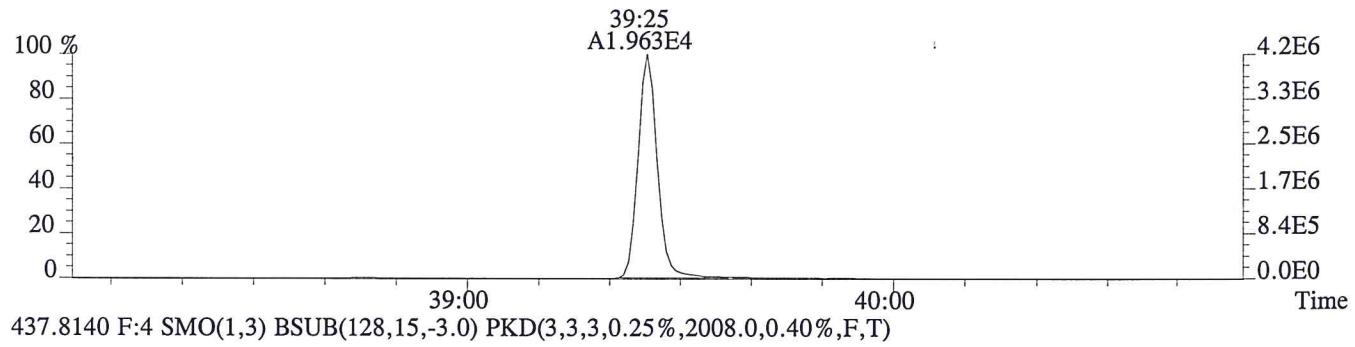
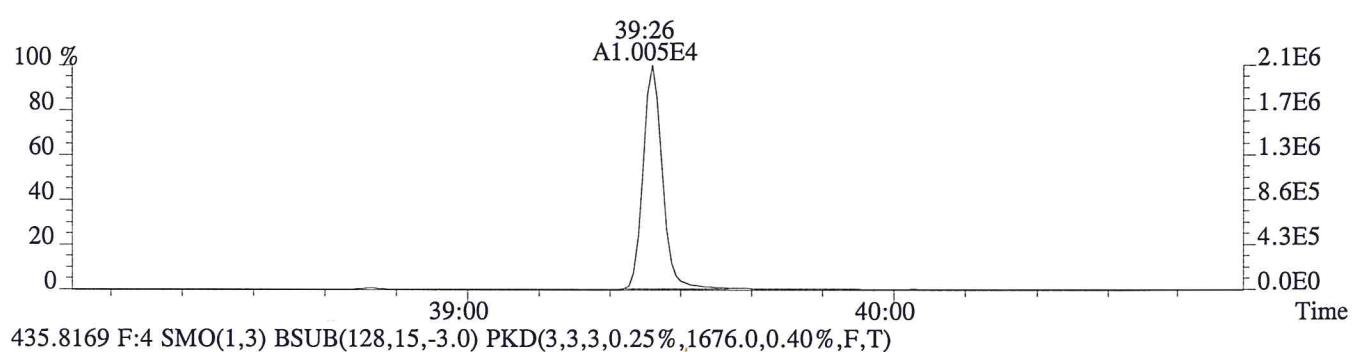
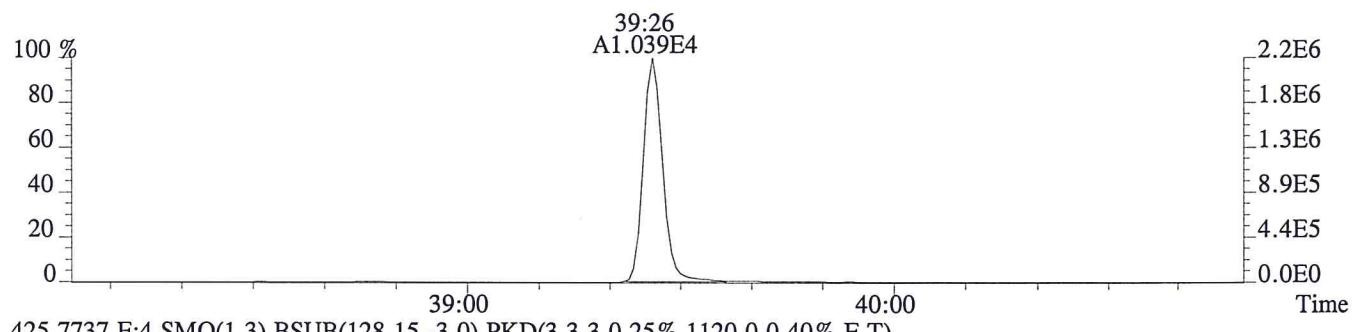
File:P600966 #1-316 Acq:14-OCT-2015 11:56:44 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:EQ1500602-02  
 389.8157 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,2296.0,0.40%,F,T)



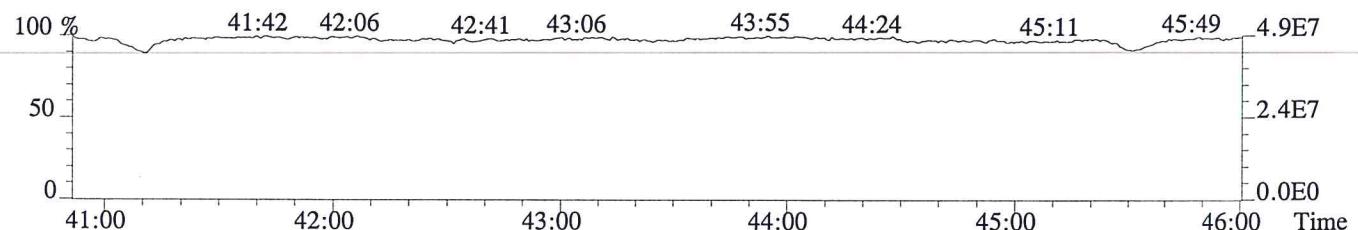
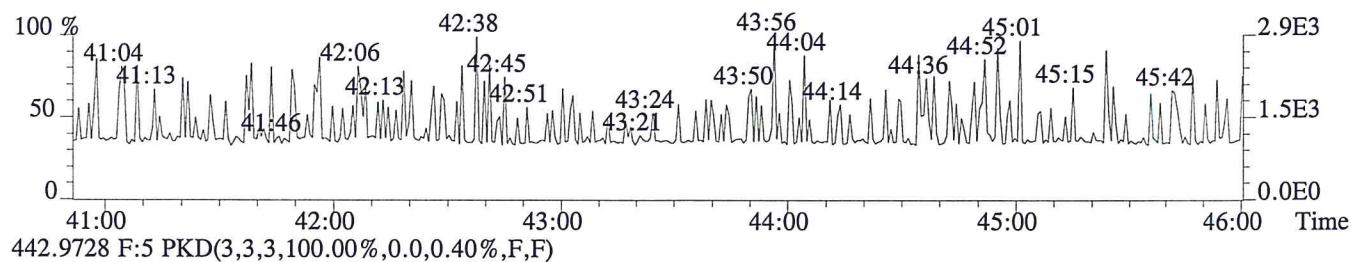
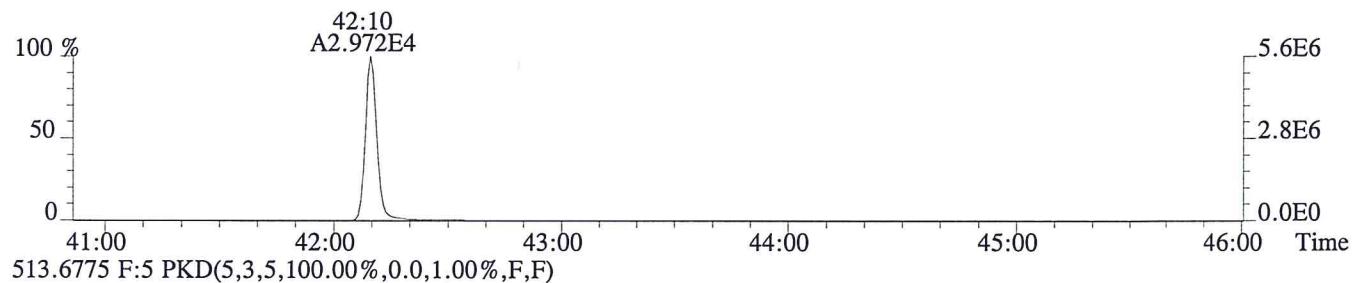
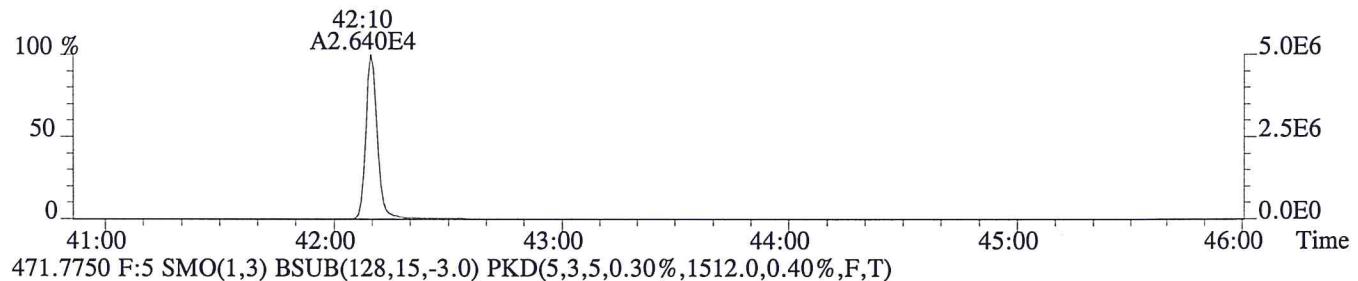
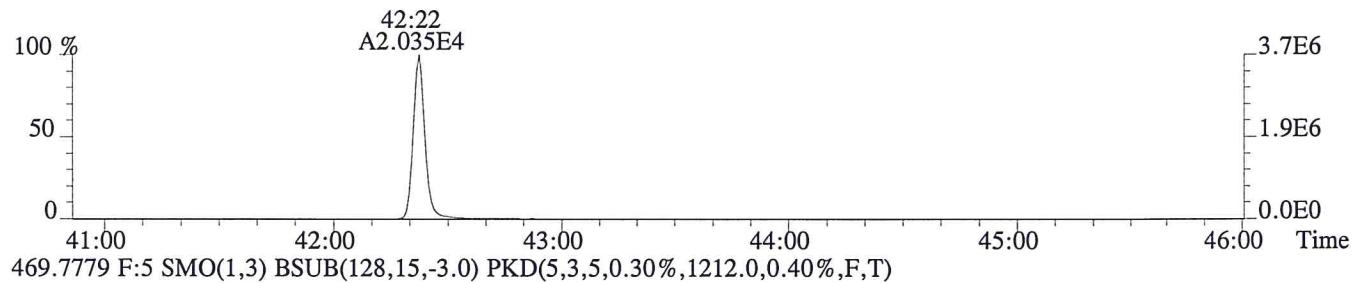
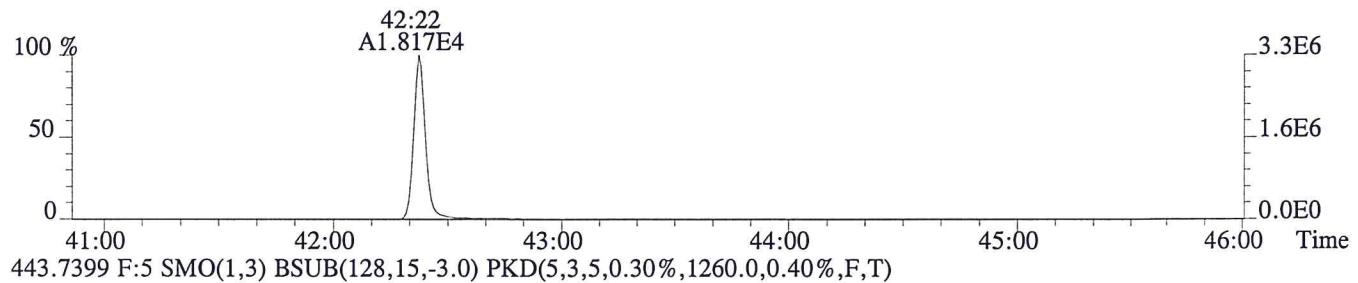
File:P600966 #1-248 Acq:14-OCT-2015 11:56:44 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:EQ1500602-02  
 407.7818 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1796.0,0.50%,F,T)



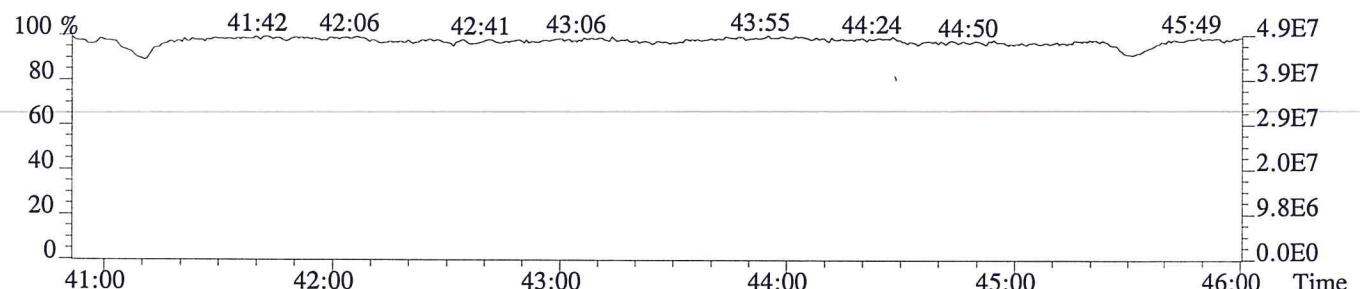
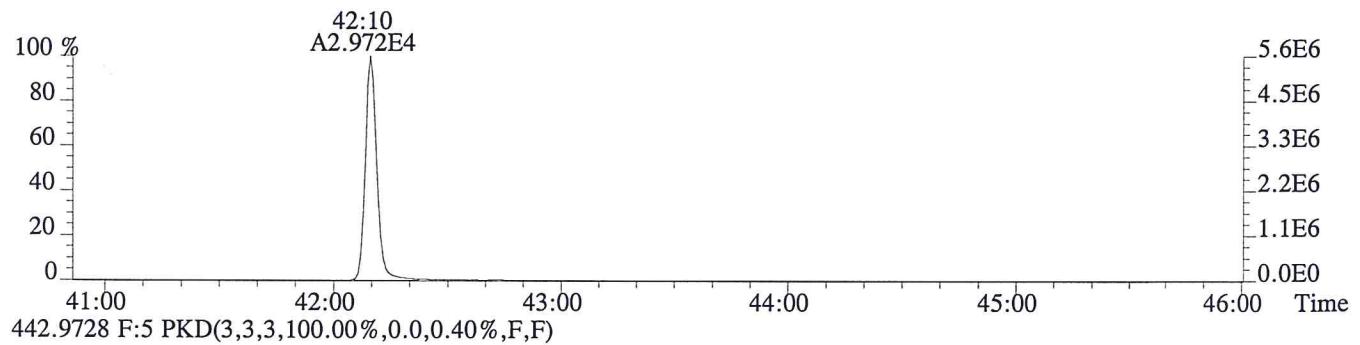
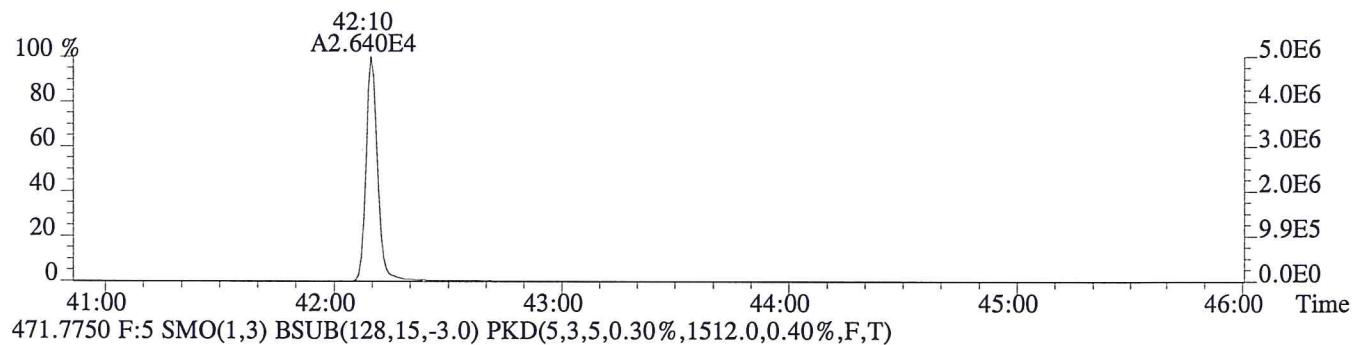
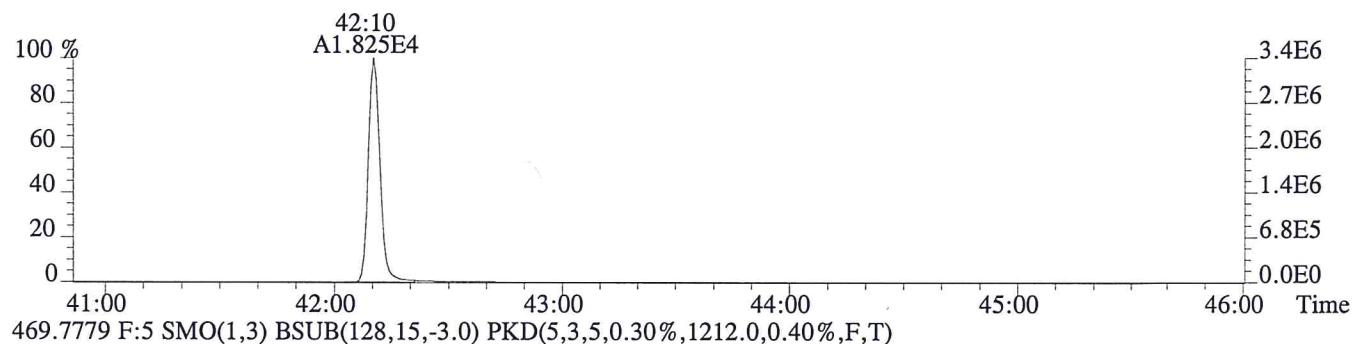
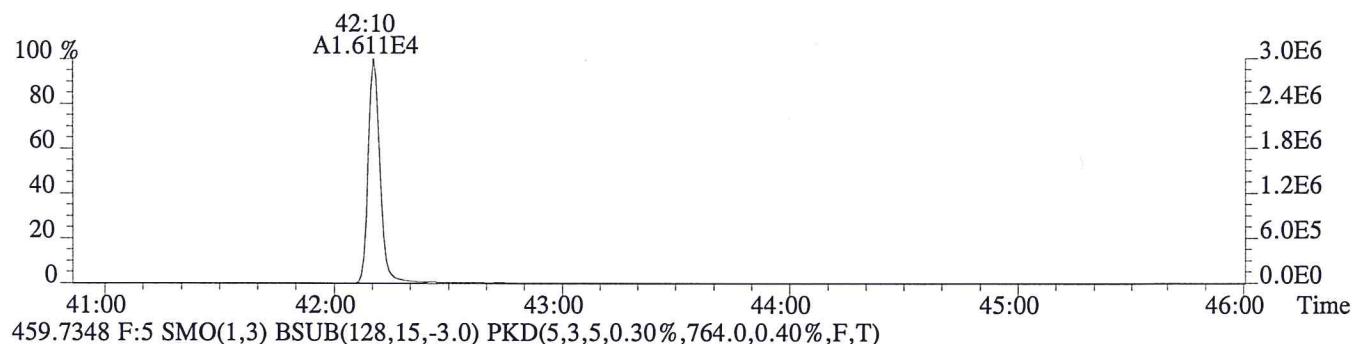
File:P600966 #1-248 Acq:14-OCT-2015 11:56:44 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:EQ1500602-02  
 423.7766 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1080.0,0.40%,F,T)



File:P600966 #1-464 Acq:14-OCT-2015 11:56:44 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:EQ1500602-02  
 441.7428 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,600.0,0.40%,F,T)



File:P600966 #1-464 Acq:14-OCT-2015 11:56:44 Probe EI+ Magnet SIR VG BioTech Mass spectf  
Sample#1 Exp:EQ1500602-02  
457.7377 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,532.0,0.40%,F,T)



ALS ENVIRONMENTAL  
Sample Response Summary

CLIENT ID.  
DLCS

Run #18    Filename P600967    Samp: 1    Inj: 1    Acquired: 14-OCT-15 12:45:45  
Processed: 21-OCT-15 15:49:53    Sample ID: EQ1500602-03

Typ	Name	RT-1	Resp 1	Resp 2	Ratio	Meet	Mod?	RRF
1	Unk                2,3,7,8-TCDF	28:09	5.976e+03	7.925e+03	0.75	yes	no	0.941
2	Unk                1,2,3,7,8-PeCDF	32:21	5.293e+04	3.426e+04	1.55	yes	no	0.987
3	Unk                2,3,4,7,8-PeCDF	33:15	5.367e+04	3.507e+04	1.53	yes	no	0.934
4	Unk                1,2,3,4,7,8-HxCDF	35:55	4.736e+04	3.859e+04	1.23	yes	no	1.189
5	Unk                1,2,3,6,7,8-HxCDF	36:02	5.034e+04	4.085e+04	1.23	yes	no	1.126
6	Unk                2,3,4,6,7,8-HxCDF	36:32	4.780e+04	3.879e+04	1.23	yes	no	1.116
7	Unk                1,2,3,7,8,9-HxCDF	37:17	4.168e+04	3.412e+04	1.22	yes	no	1.158
8	Unk                1,2,3,4,6,7,8-HpCDF	38:31	3.557e+04	3.444e+04	1.03	yes	no	1.373
9	Unk                1,2,3,4,7,8,9-HpCDF	39:54	3.276e+04	3.201e+04	1.02	yes	no	1.287
10	Unk                OCDF	42:22	5.112e+04	5.696e+04	0.90	yes	no	1.257
11	Unk                2,3,7,8-TCDD	28:55	5.295e+03	6.800e+03	0.78	yes	no	1.010
12	Unk                1,2,3,7,8-PeCDD	33:32	4.433e+04	2.855e+04	1.55	yes	no	0.932
13	Unk                1,2,3,4,7,8-HxCDD	36:40	3.886e+04	3.102e+04	1.25	yes	no	1.026
14	Unk                1,2,3,6,7,8-HxCDD	36:44	3.969e+04	3.178e+04	1.25	yes	no	1.021
15	Unk                1,2,3,7,8,9-HxCDD	36:59	4.033e+04	3.316e+04	1.22	yes	no	1.133
16	Unk                1,2,3,4,6,7,8-HpCDD	39:26	2.963e+04	2.873e+04	1.03	yes	no	1.034
17	Unk                OCDD	42:10	4.521e+04	5.126e+04	0.88	yes	no	1.111
18	IS                 13C-2,3,7,8-TCDF	28:08	5.931e+04	7.550e+04	0.79	yes	no	1.379
19	IS                 13C-1,2,3,7,8-PeCDF	32:20	1.026e+05	6.565e+04	1.56	yes	no	1.456
20	IS                 13C-2,3,4,7,8-PeCDF	33:15	1.037e+05	6.594e+04	1.57	yes	no	1.465
21	IS                 13C-1,2,3,4,7,8-HxCDF	35:54	4.335e+04	8.500e+04	0.51	yes	no	1.075
22	IS                 13C-1,2,3,6,7,8-HxCDF	36:01	5.099e+04	9.896e+04	0.52	yes	no	1.158
23	IS                 13C-2,3,4,6,7,8-HxCDF	36:31	4.864e+04	9.384e+04	0.52	yes	no	1.133
24	IS                 13C-1,2,3,7,8,9-HxCDF	37:16	4.246e+04	8.288e+04	0.51	yes	no	1.024
25	IS                 13C-1,2,3,4,6,7,8-HpCDF	38:31	2.811e+04	6.518e+04	0.43	yes	no	0.880
26	IS                 13C-1,2,3,4,7,8,9-HpCDF	39:53	2.829e+04	6.508e+04	0.43	yes	no	0.914
27	IS                 13C-2,3,7,8-TCDD	28:54	4.580e+04	5.738e+04	0.80	yes	no	1.193
28	IS                 13C-1,2,3,7,8-PeCDD	33:31	7.890e+04	5.006e+04	1.58	yes	no	1.094
29	IS                 13C-1,2,3,4,7,8-HxCDD	36:39	6.628e+04	5.234e+04	1.27	yes	no	0.906
30	IS                 13C-1,2,3,6,7,8-HxCDD	36:44	6.898e+04	5.503e+04	1.25	yes	no	0.860
31	IS                 13C-1,2,3,4,6,7,8-HpCDD	39:25	5.363e+04	5.107e+04	1.05	yes	no	0.892
32	IS                 13C-OCDD	42:10	7.362e+04	8.227e+04	0.89	yes	no	0.642
33	RS/RT             13C-1,2,3,4-TCDD	28:21	6.038e+04	7.621e+04	0.79	yes	no	-
34	RS/RT             13C-1,2,3,7,8,9-HxCDD	36:58	8.727e+04	6.897e+04	1.27	yes	no	-
35	C/Up              37Cl-2,3,7,8-TCDD	28:55	4.677e+04				no	1.263

$$(4.521e+04 + 5.126e+04) \times 4000 \text{ pg} \times 1$$

OCDD =----- =  

$$(7.362e+04 + 8.227e+04) \times \text{g} \times / 100 \times 1.111$$

---

ALS ENVIRONMENTAL -- HOUSTON HRMS  
10450 Stancliff Rd., Suite 115  
Houston, TX 77099  
Telephone: (713) 266-1599. Fax (713) 266-0130

ALS ENVIRONMENTAL  
Signal/Noise Height Ratio Summary

CLIENT ID.  
DLCS

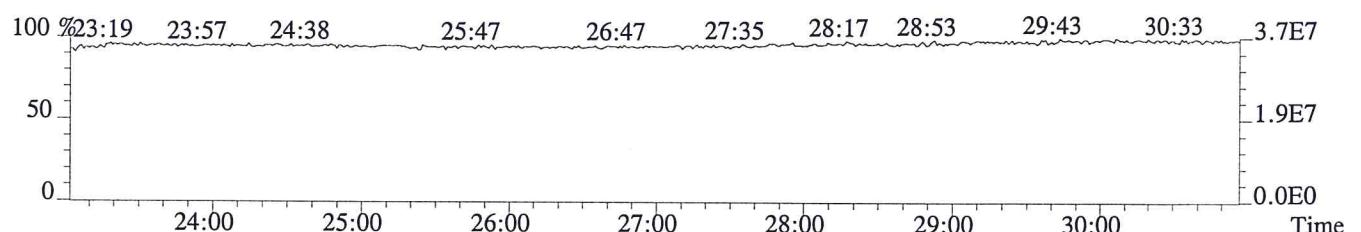
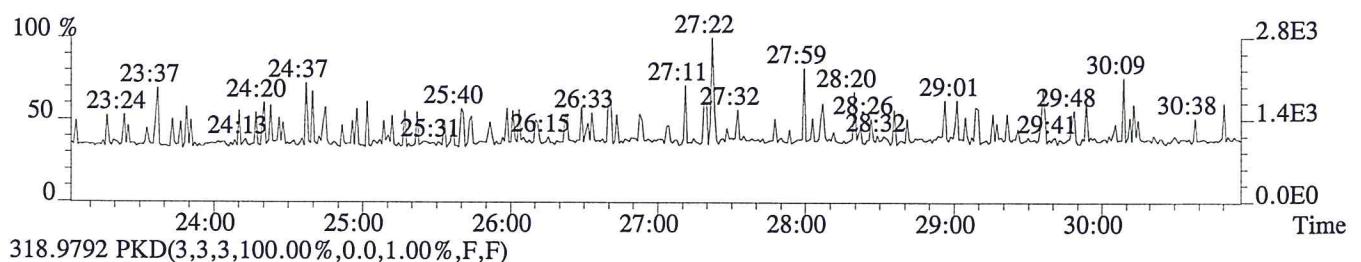
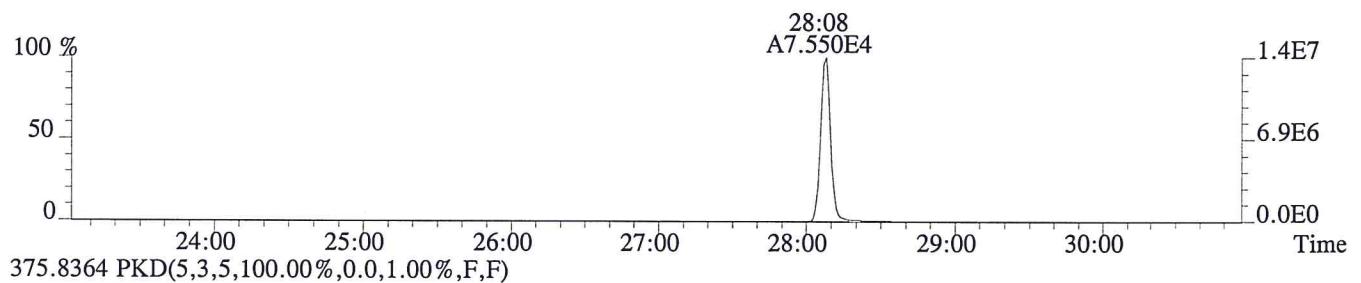
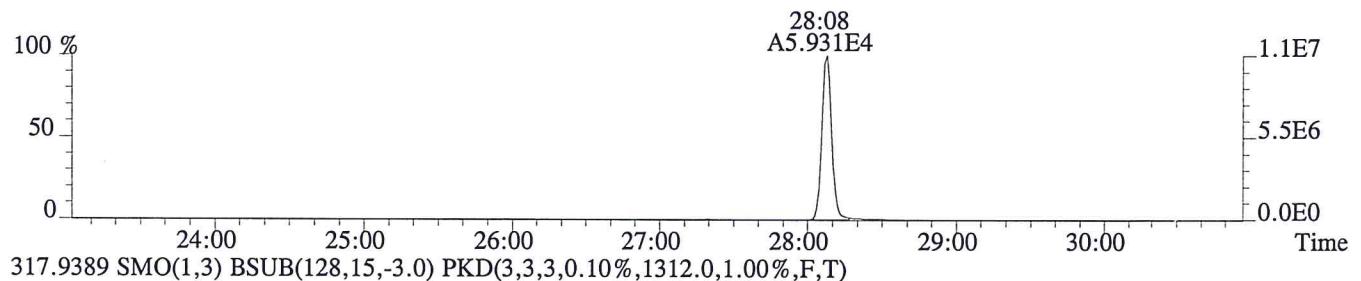
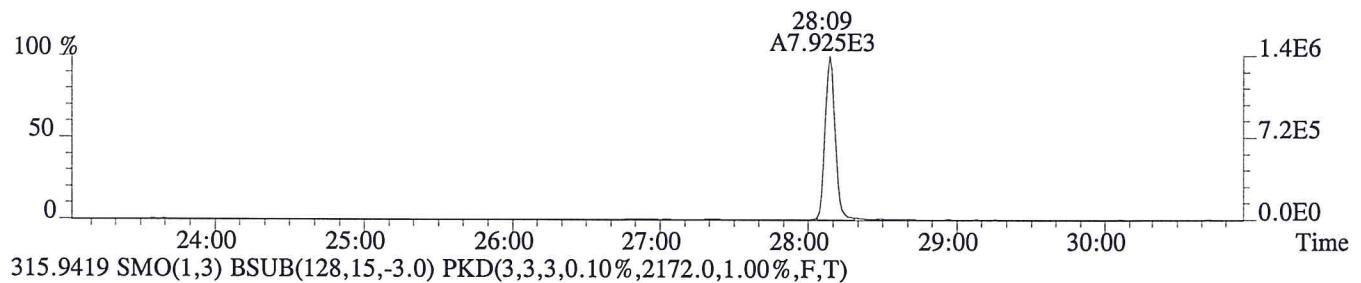
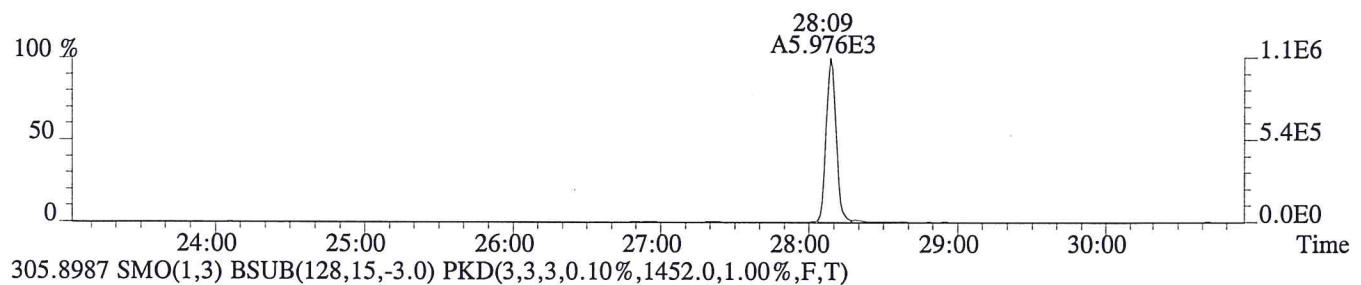
Run #18   Filename P600967              Samp: 1    Inj: 1    Acquired: 14-OCT-15 12:45:45  
Processed: 21-OCT-15 15:49:53              LAB. ID: EQ1500602-03

	Name	Signal 1	Noise 1	S/N Rat.1	Signal 2	Noise 2	S/N Rat.2
1	2,3,7,8-TCDF	1.09e+06	7.96e+02	1.4e+03	1.43e+06	1.45e+03	9.9e+02
2	1,2,3,7,8-PeCDF	9.85e+06	2.76e+02	3.6e+04	6.44e+06	2.33e+03	2.8e+03
3	2,3,4,7,8-PeCDF	1.09e+07	2.76e+02	3.9e+04	6.96e+06	2.33e+03	3.0e+03
4	1,2,3,4,7,8-HxCDF	1.03e+07	1.12e+03	9.2e+03	8.56e+06	5.92e+02	1.4e+04
5	1,2,3,6,7,8-HxCDF	1.09e+07	1.12e+03	9.7e+03	8.88e+06	5.92e+02	1.5e+04
6	2,3,4,6,7,8-HxCDF	1.06e+07	1.12e+03	9.5e+03	8.72e+06	5.92e+02	1.5e+04
7	1,2,3,7,8,9-HxCDF	8.85e+06	1.12e+03	7.9e+03	7.20e+06	5.92e+02	1.2e+04
8	1,2,3,4,6,7,8-HpCDF	8.15e+06	2.81e+03	2.9e+03	7.82e+06	3.28e+03	2.4e+03
9	1,2,3,4,7,8,9-HpCDF	6.83e+06	2.81e+03	2.4e+03	6.70e+06	3.28e+03	2.0e+03
10	OCDF	9.28e+06	6.12e+02	1.5e+04	1.03e+07	7.56e+02	1.4e+04
11	2,3,7,8-TCDD	9.87e+05	5.96e+02	1.7e+03	1.30e+06	9.48e+02	1.4e+03
12	1,2,3,7,8-PeCDD	9.11e+06	1.44e+03	6.3e+03	5.81e+06	9.52e+02	6.1e+03
13	1,2,3,4,7,8-HxCDD	9.15e+06	1.02e+03	9.0e+03	7.18e+06	1.08e+03	6.7e+03
14	1,2,3,6,7,8-HxCDD	8.62e+06	1.02e+03	8.5e+03	6.97e+06	1.08e+03	6.5e+03
15	1,2,3,7,8,9-HxCDD	9.12e+06	1.02e+03	9.0e+03	7.41e+06	1.08e+03	6.9e+03
16	1,2,3,4,6,7,8-HpCDD	6.27e+06	1.13e+03	5.5e+03	6.05e+06	8.52e+02	7.1e+03
17	OCDD	8.57e+06	4.76e+02	1.8e+04	9.65e+06	7.24e+02	1.3e+04
18	13C-2,3,7,8-TCDF	1.09e+07	2.17e+03	5.0e+03	1.37e+07	1.31e+03	1.0e+04
19	13C-1,2,3,7,8-PeCDF	1.96e+07	9.00e+02	2.2e+04	1.26e+07	1.27e+03	9.9e+03
20	13C-2,3,4,7,8-PeCDF	2.06e+07	9.00e+02	2.3e+04	1.31e+07	1.27e+03	1.0e+04
21	13C-1,2,3,4,7,8-HxCDF	9.68e+06	1.38e+03	7.0e+03	1.90e+07	1.44e+03	1.3e+04
22	13C-1,2,3,6,7,8-HxCDF	1.12e+07	1.38e+03	8.1e+03	2.17e+07	1.44e+03	1.5e+04
23	13C-2,3,4,6,7,8-HxCDF	1.09e+07	1.38e+03	7.9e+03	2.11e+07	1.44e+03	1.5e+04
24	13C-1,2,3,7,8,9-HxCDF	9.10e+06	1.38e+03	6.6e+03	1.75e+07	1.44e+03	1.2e+04
25	13C-1,2,3,4,6,7,8-HpCDF	6.45e+06	3.59e+03	1.8e+03	1.49e+07	2.11e+03	7.1e+03
26	13C-1,2,3,4,7,8,9-HpCDF	5.88e+06	3.59e+03	1.6e+03	1.35e+07	2.11e+03	6.4e+03
27	13C-2,3,7,8-TCDD	8.94e+06	3.76e+03	2.4e+03	1.12e+07	2.71e+03	4.1e+03
28	13C-1,2,3,7,8-PeCDD	1.56e+07	7.36e+02	2.1e+04	9.84e+06	7.20e+02	1.4e+04
29	13C-1,2,3,4,7,8-HxCDD	1.56e+07	2.18e+03	7.1e+03	1.21e+07	1.32e+03	9.1e+03
30	13C-1,2,3,6,7,8-HxCDD	1.49e+07	2.18e+03	6.8e+03	1.20e+07	1.32e+03	9.1e+03
31	13C-1,2,3,4,6,7,8-HpCDD	1.13e+07	1.62e+03	6.9e+03	1.09e+07	1.50e+03	7.3e+03
32	13C-OCDD	1.40e+07	1.26e+03	1.1e+04	1.56e+07	1.14e+03	1.4e+04
33	13C-1,2,3,4-TCDD	1.16e+07	3.76e+03	3.1e+03	1.46e+07	2.71e+03	5.4e+03
34	13C-1,2,3,7,8,9-HxCDD	1.98e+07	2.18e+03	9.1e+03	1.57e+07	1.32e+03	1.2e+04
35	37Cl-2,3,7,8-TCDD	8.94e+06	1.38e+03	6.5e+03			

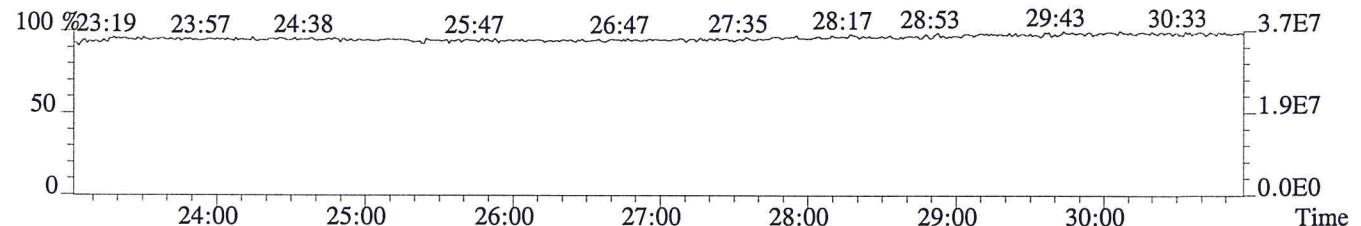
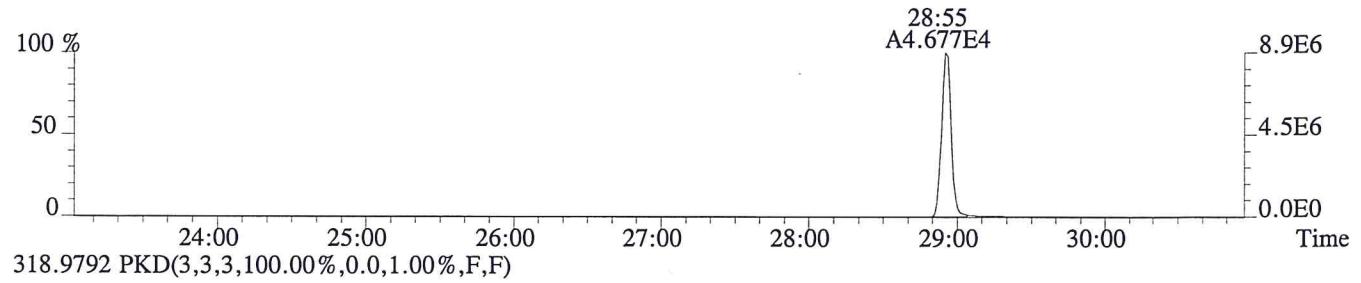
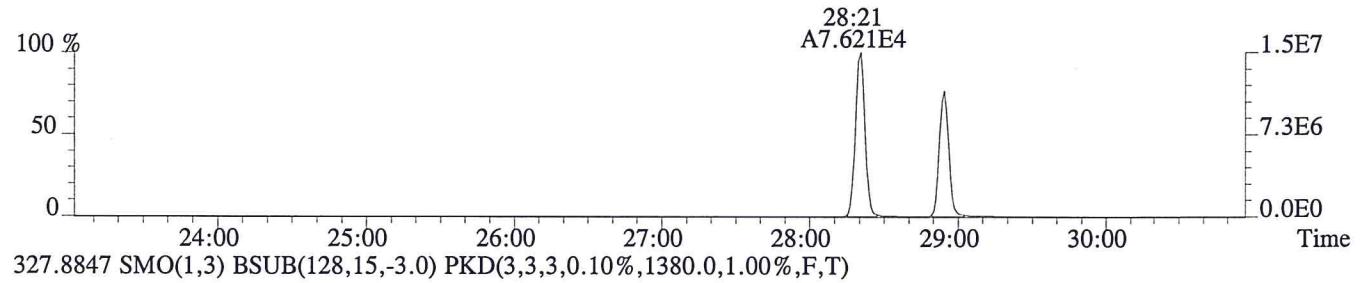
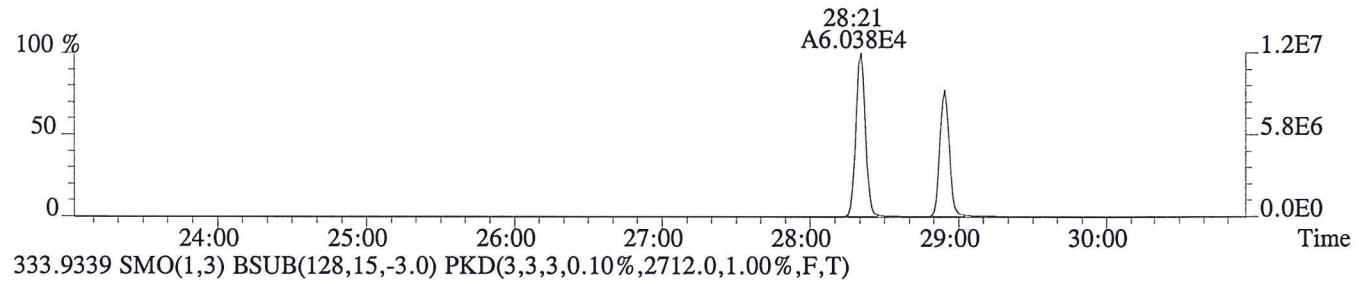
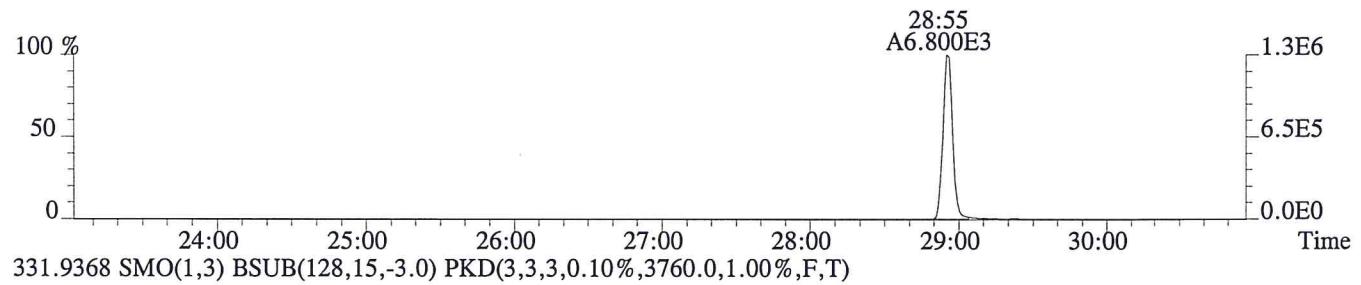
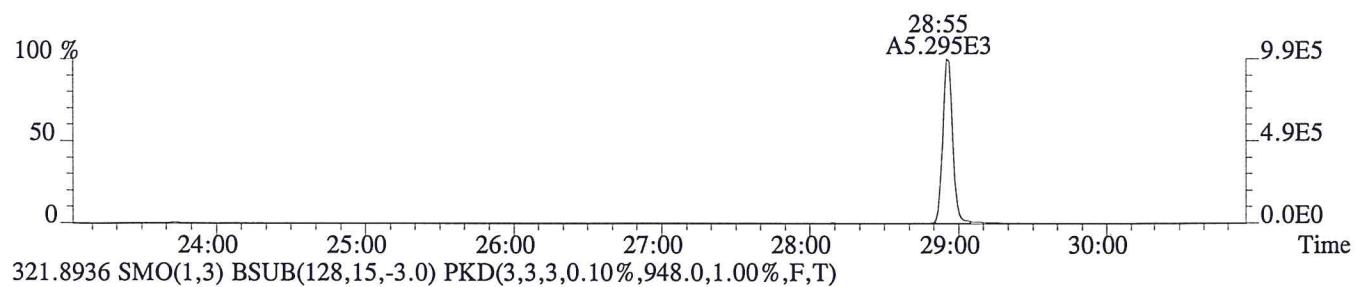
---

ALS ENVIRONMENTAL  
10450 Stancliff Rd., Suite 115  
Houston, TX 77099  
Office: (713) 266-1599. Fax: (713) 266-0130

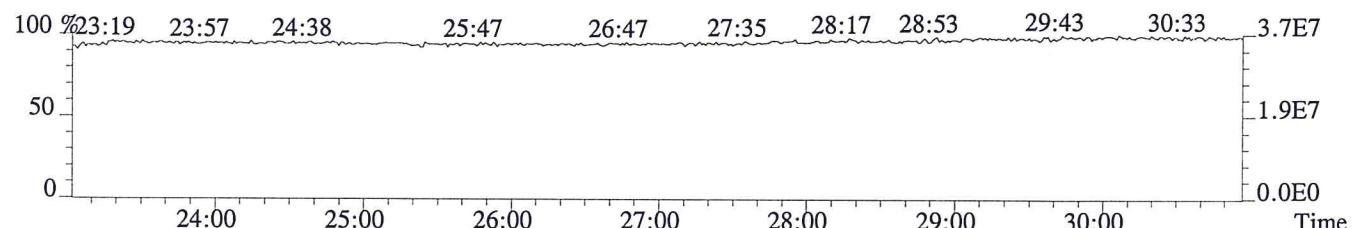
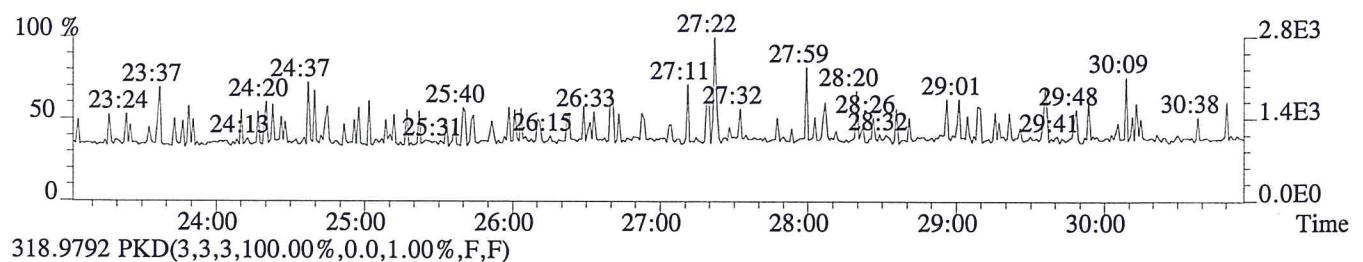
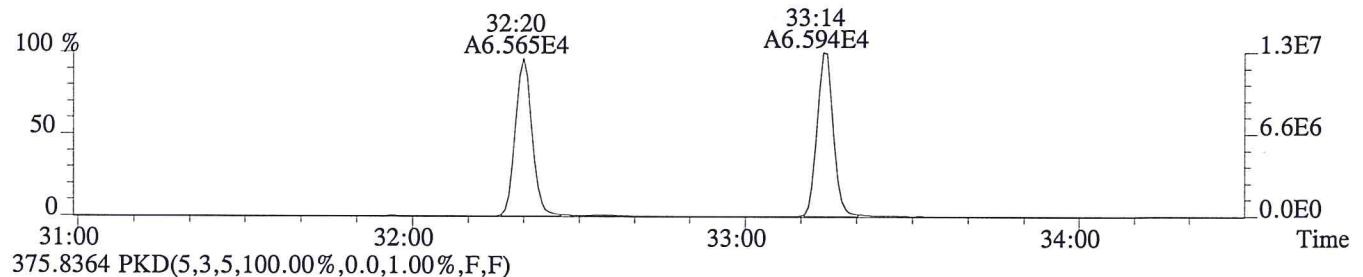
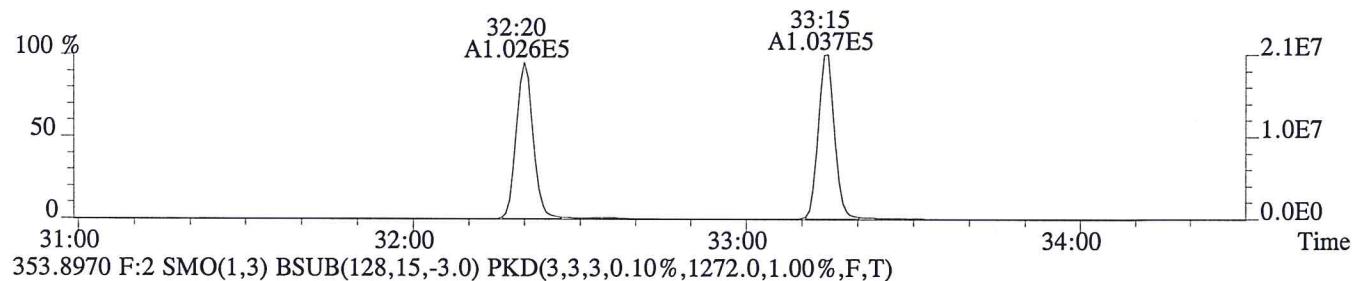
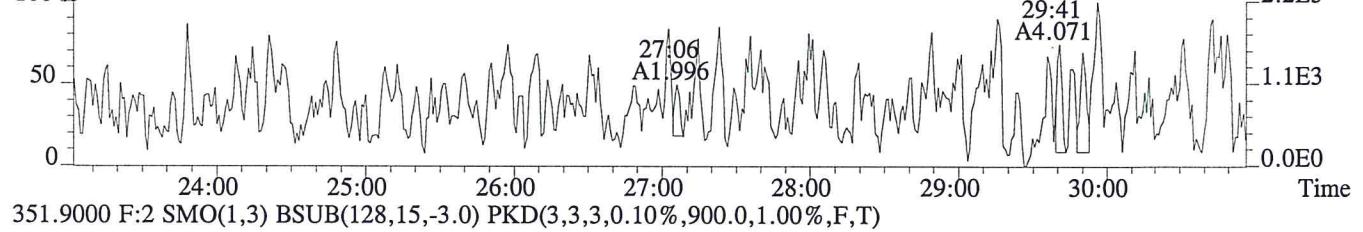
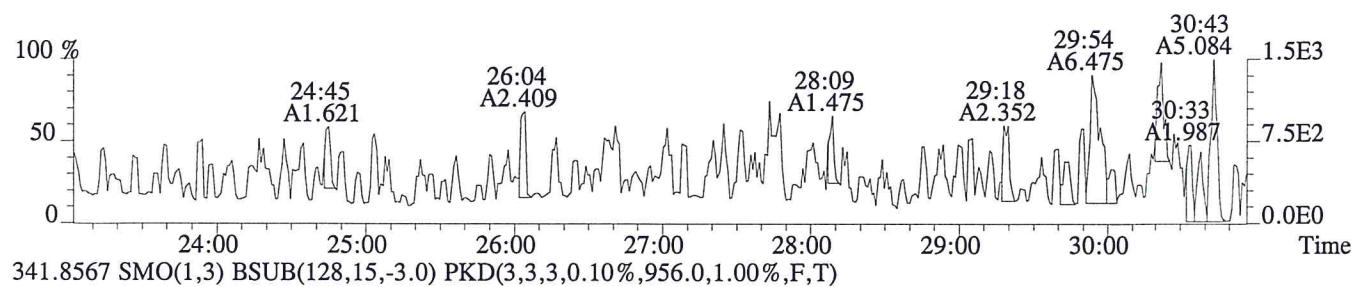
File:P600967 #1-562 Acq:14-OCT-2015 12:45:45 Probe EI+ Magnet SIR VG BioTech Mass spect&  
 Sample#1 Exp:EQ1500602-03  
 303.9016 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,796.0,1.00%,F,T)



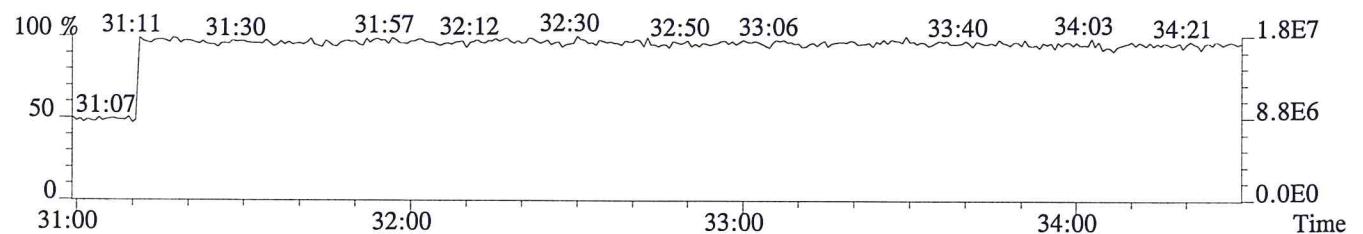
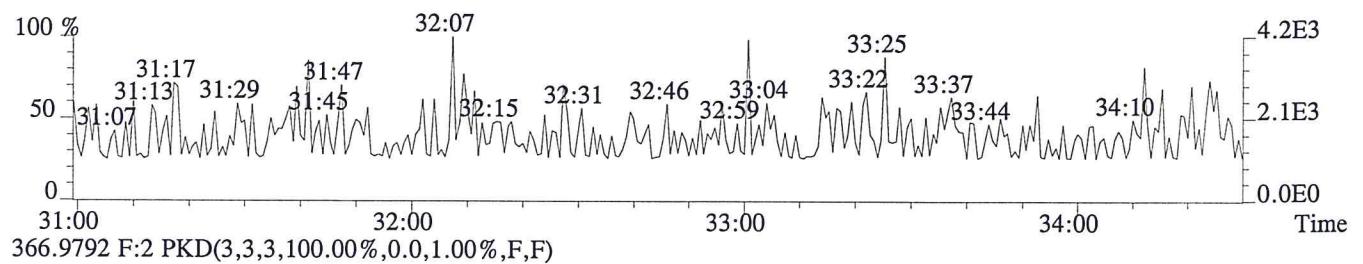
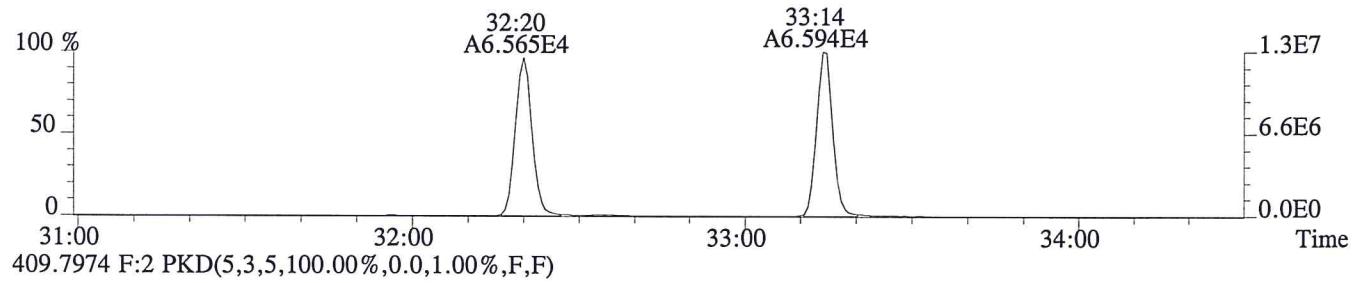
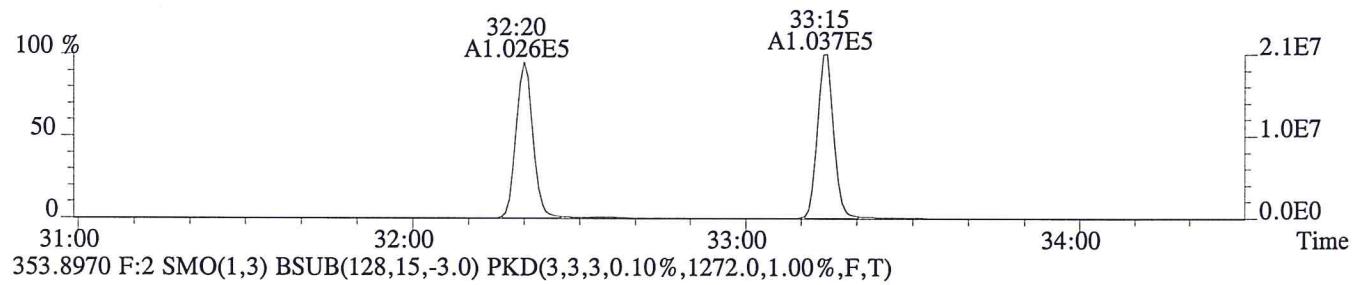
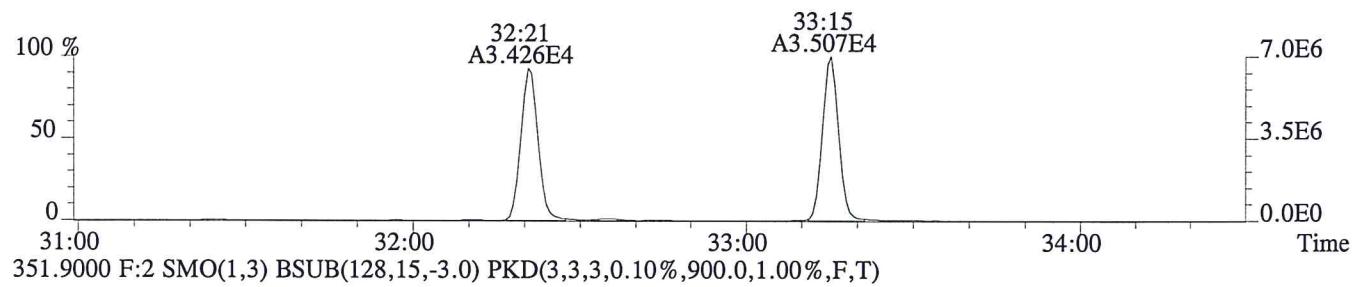
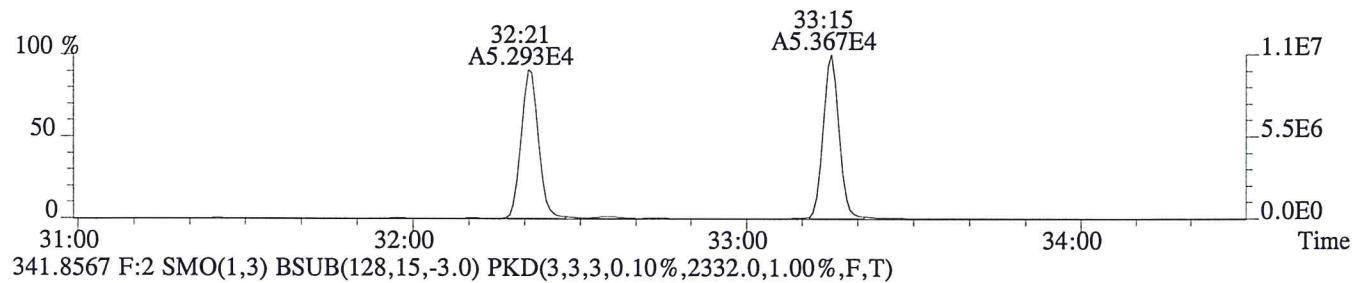
File:P600967 #1-562 Acq:14-OCT-2015 12:45:45 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:EQ1500602-03  
 319.8965 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,596.0,1.00%,F,T)



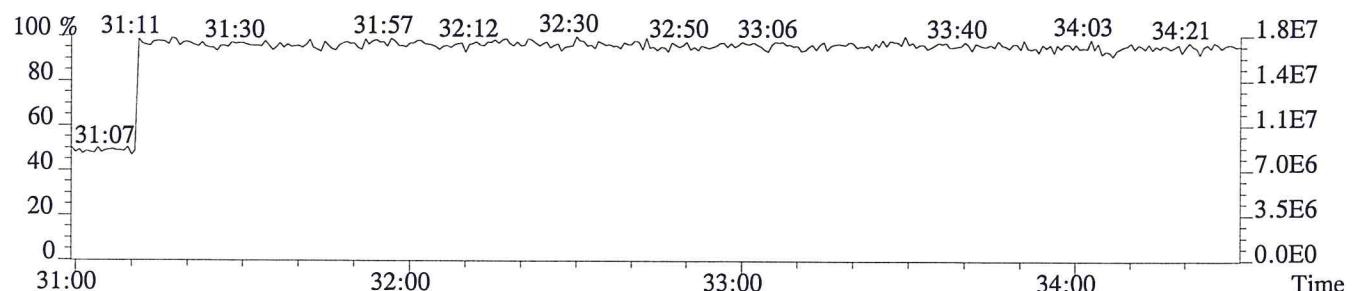
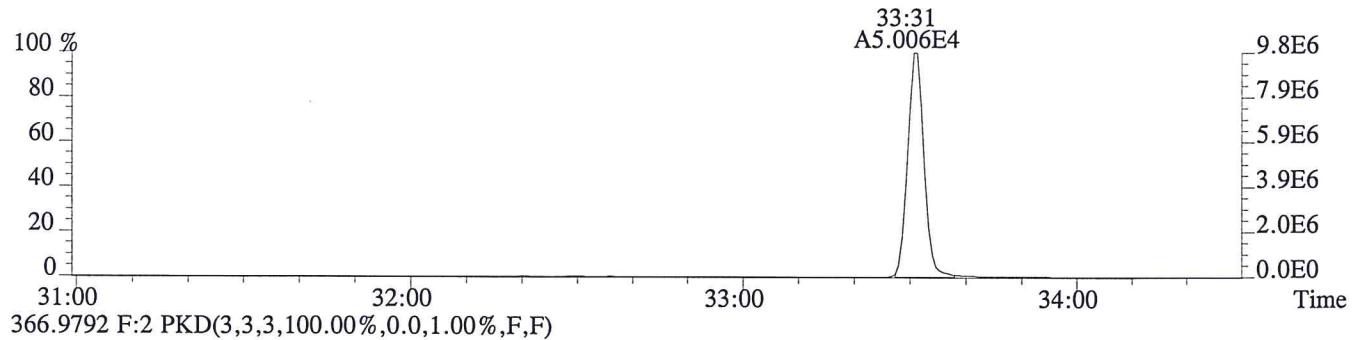
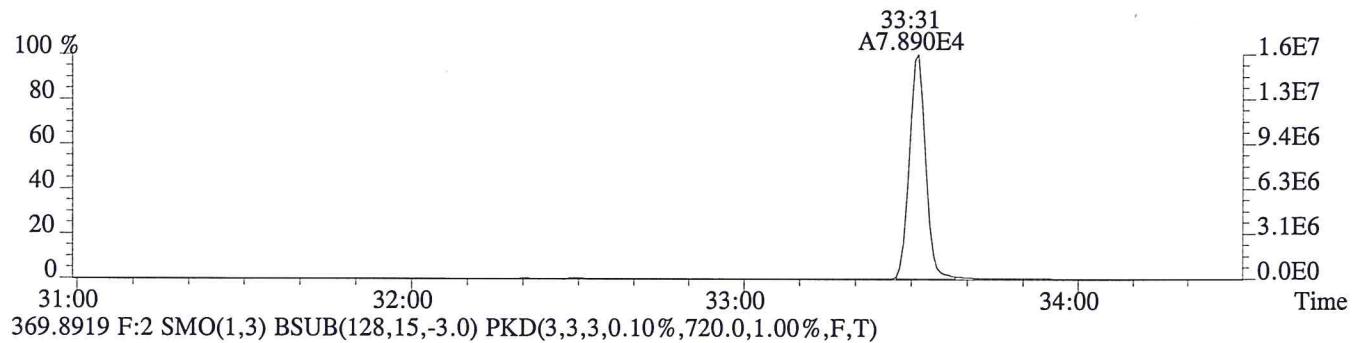
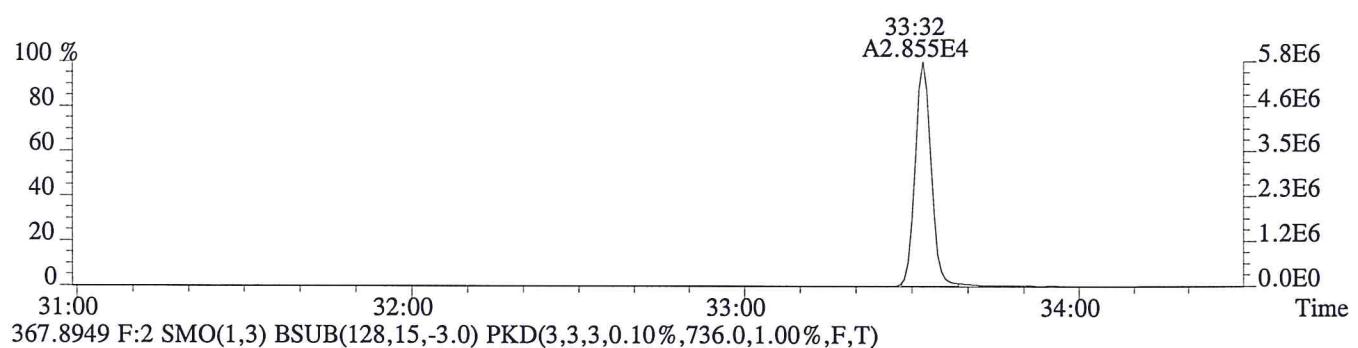
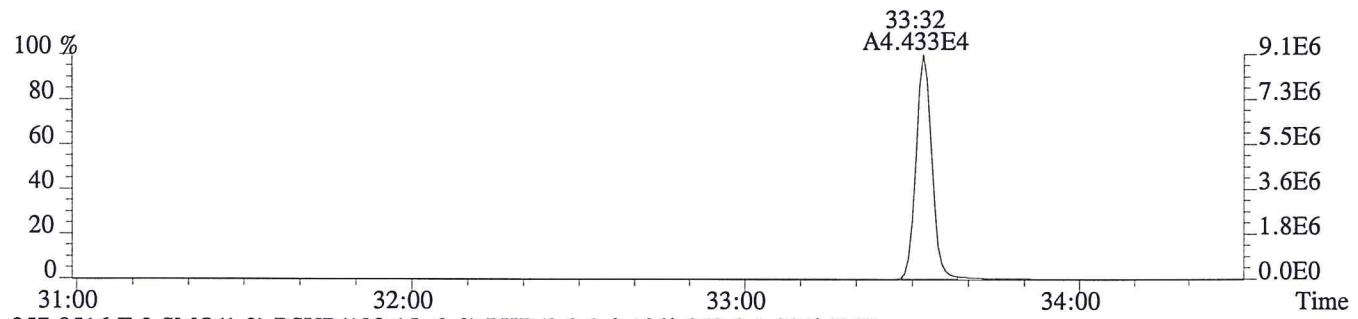
File:P600967 #1-562 Acq:14-OCT-2015 12:45:45 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:EQ1500602-03  
 339.8597 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,472.0,1.00%,F,T)



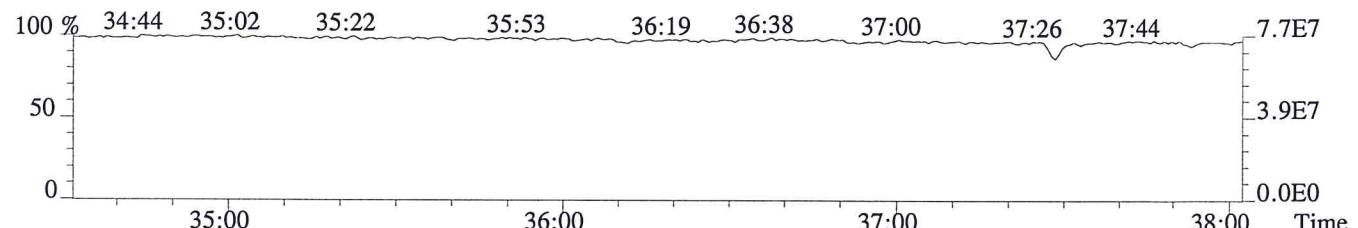
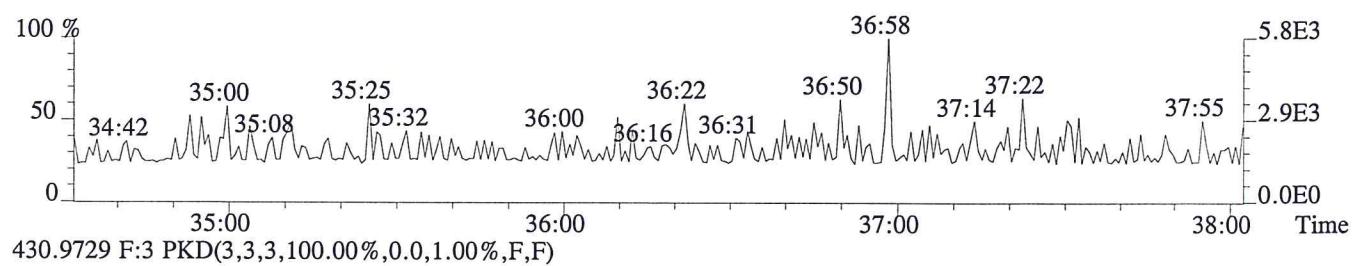
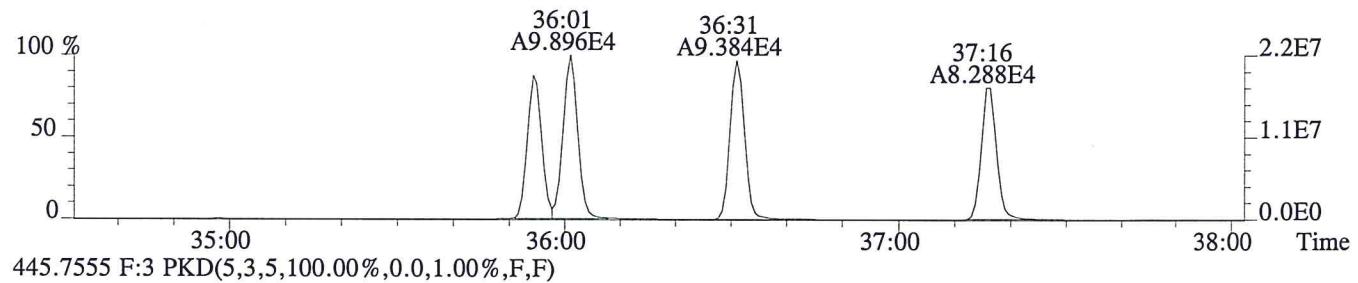
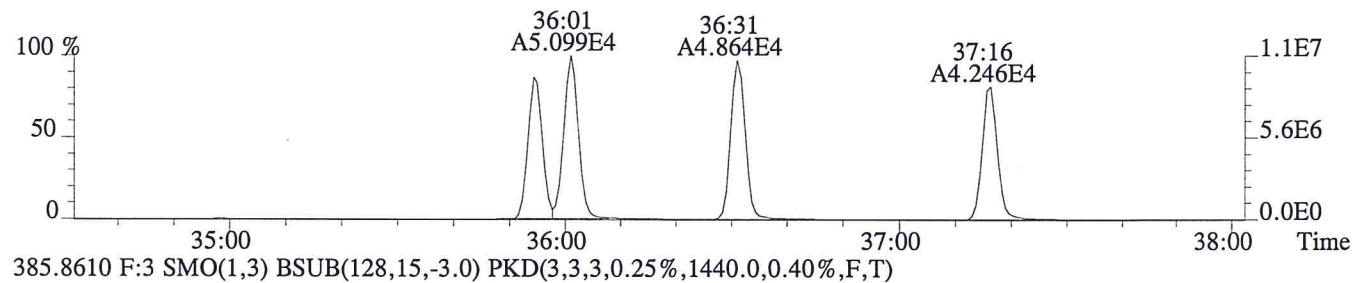
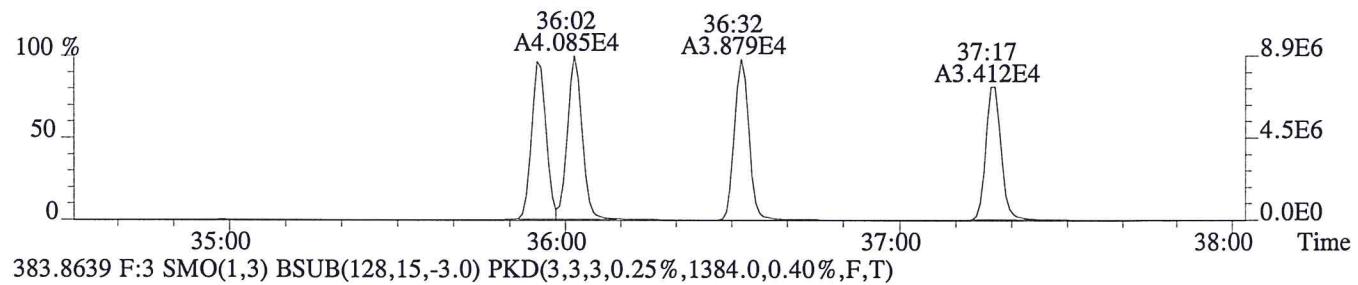
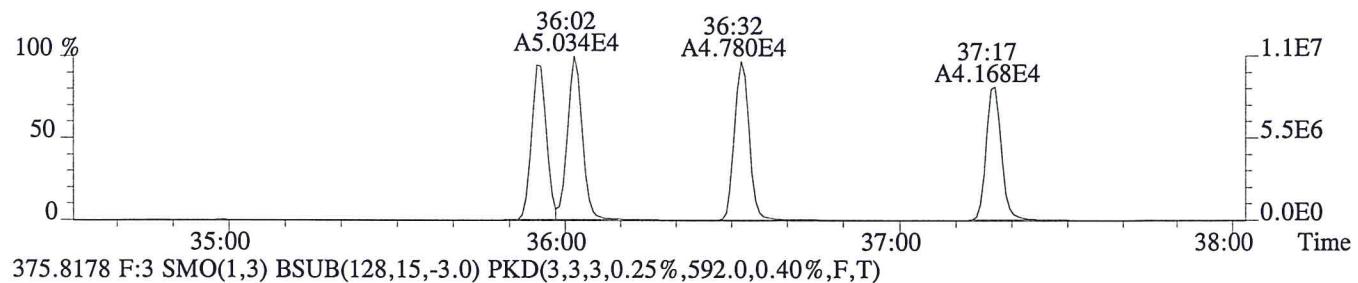
File:P600967 #1-317 Acq:14-OCT-2015 12:45:45 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:EQ1500602-03  
 339.8597 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,276.0,1.00%,F,T)



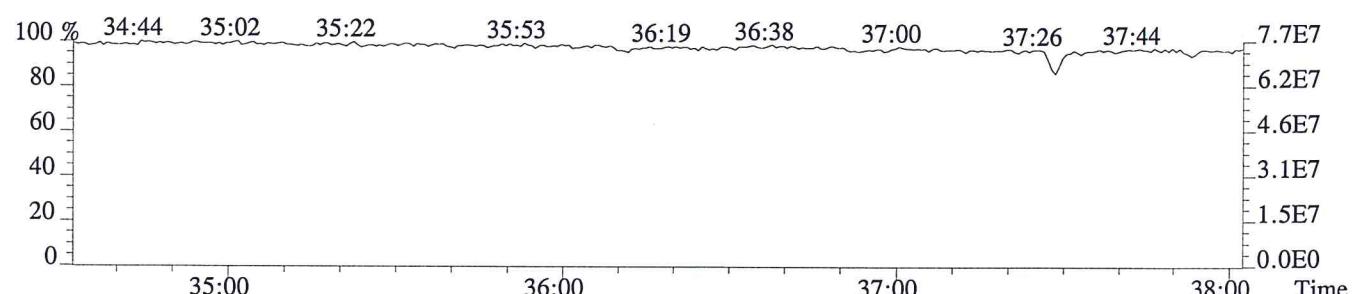
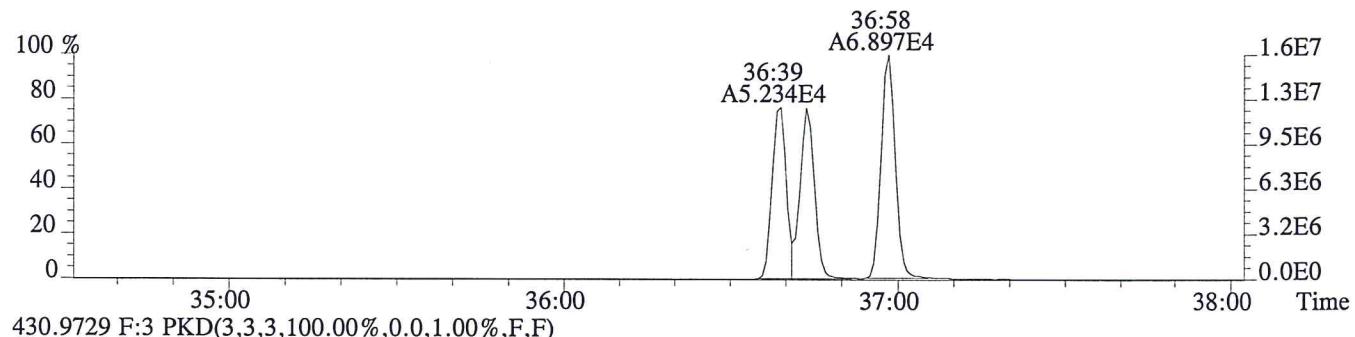
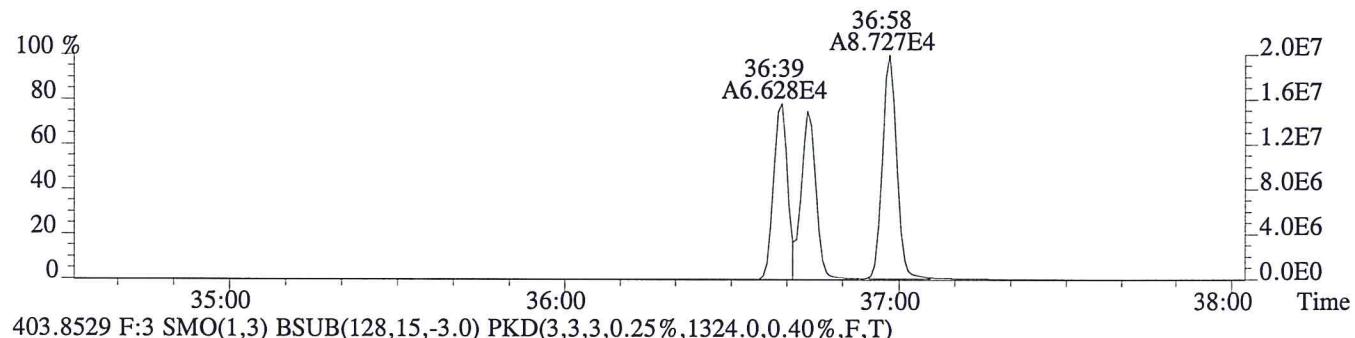
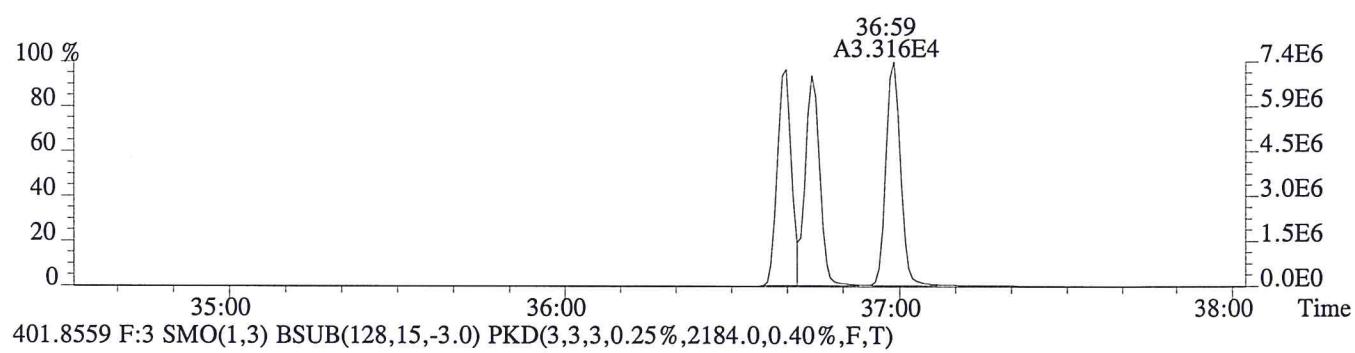
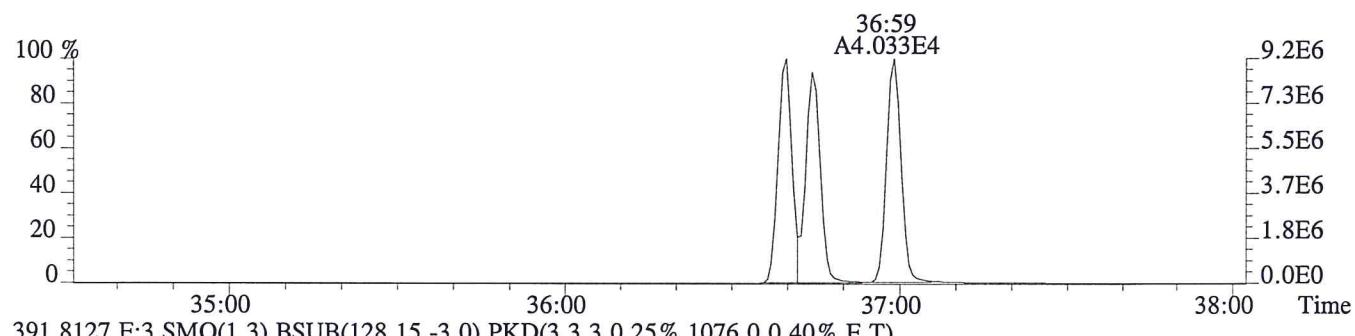
File:P600967 #1-317 Acq:14-OCT-2015 12:45:45 Probe EI+ Magnet SIR VG BioTech Mass spect<br/>Sample#1 Exp:EQ1500602-03  
355.8546 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1440.0,1.00%,F,T)



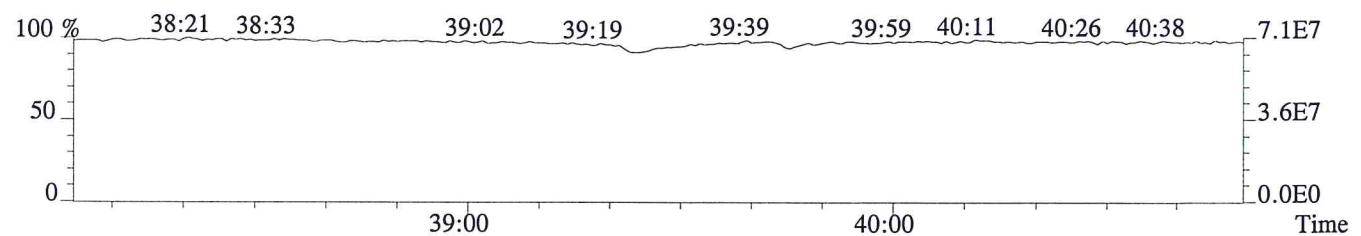
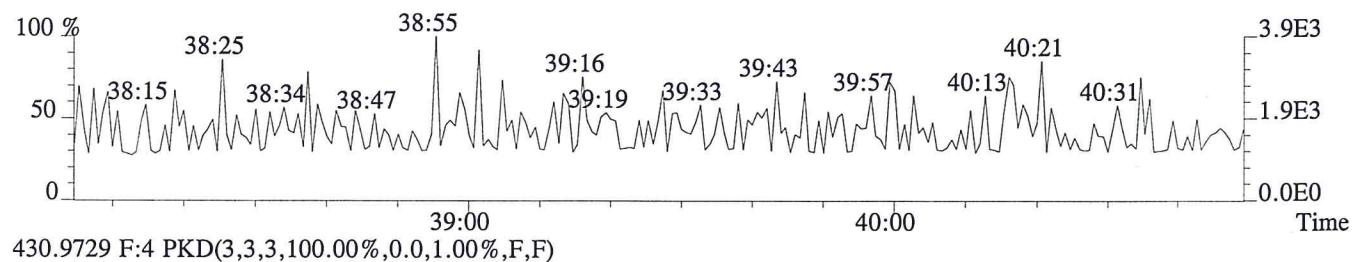
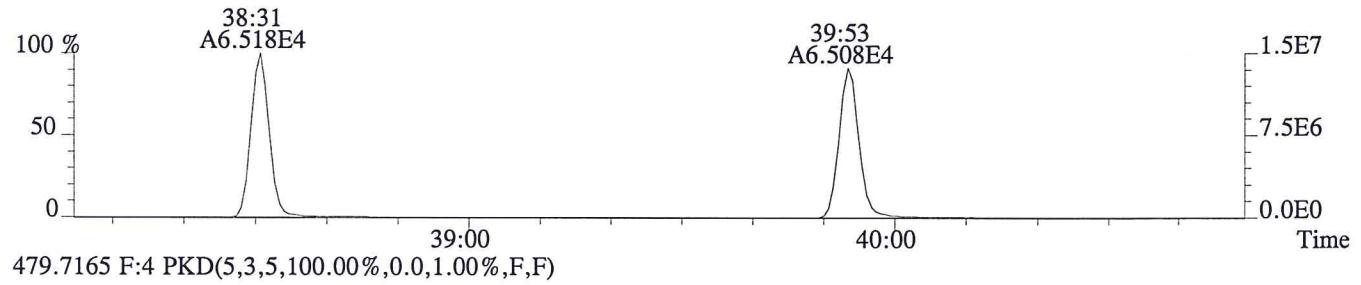
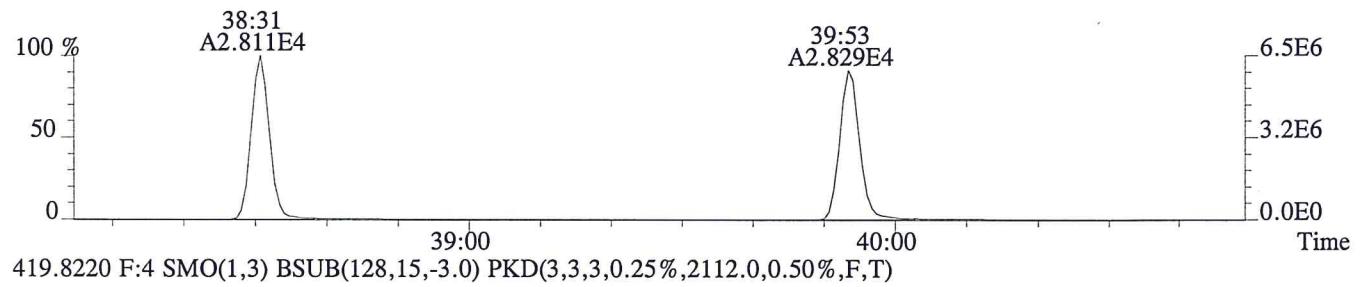
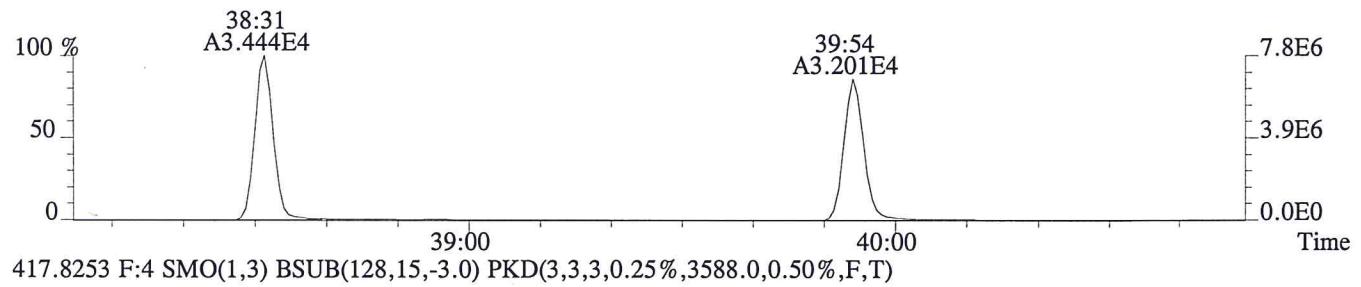
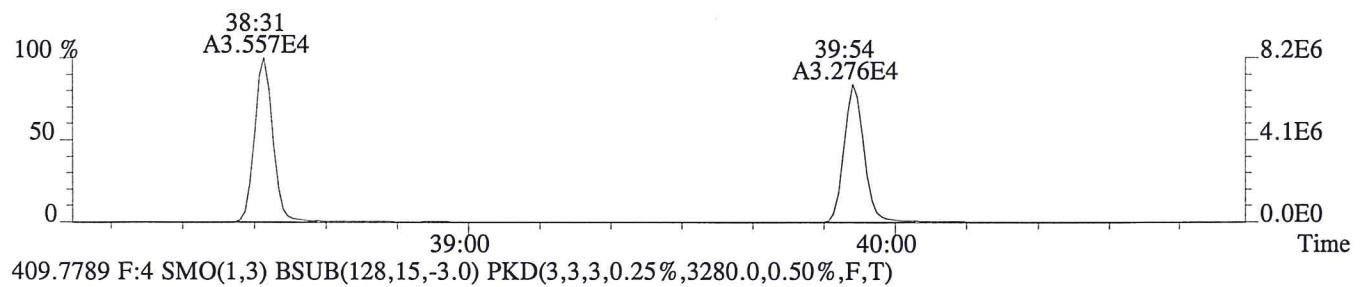
File:P600967 #1-316 Acq:14-OCT-2015 12:45:45 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:EQ1500602-03  
 373.8208 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1120.0,0.40%,F,T)



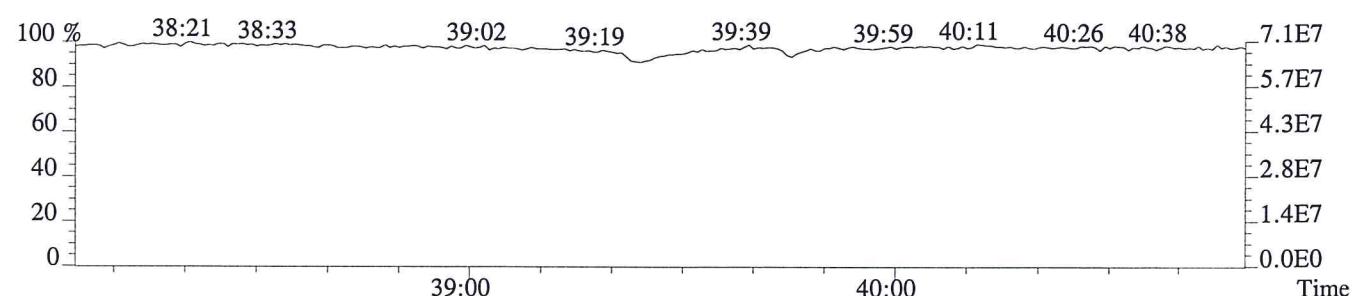
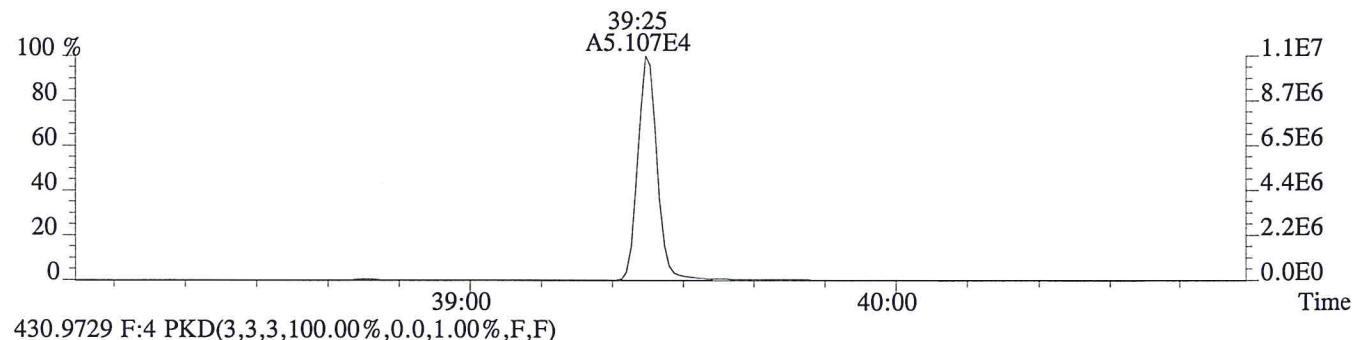
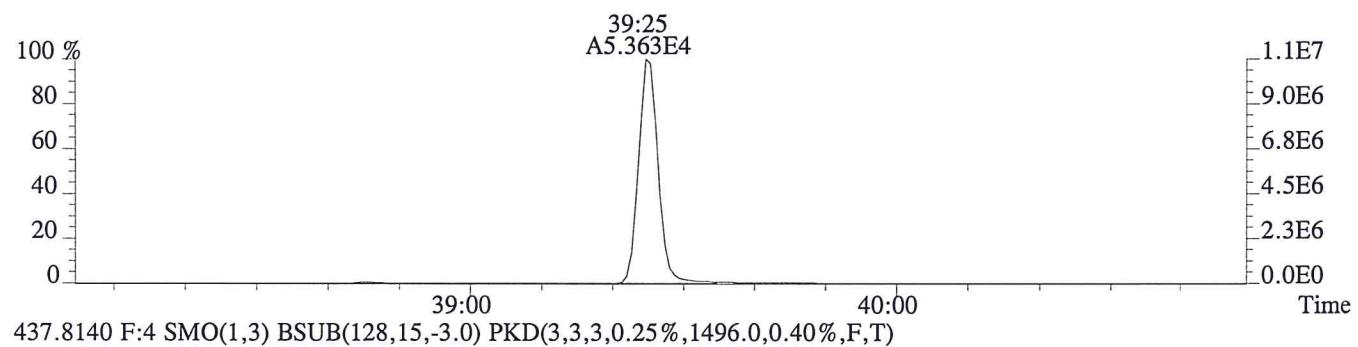
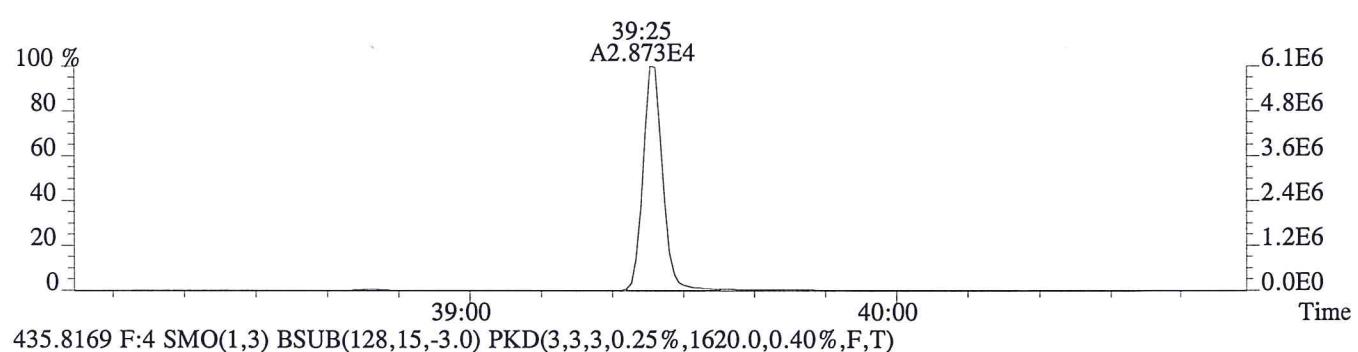
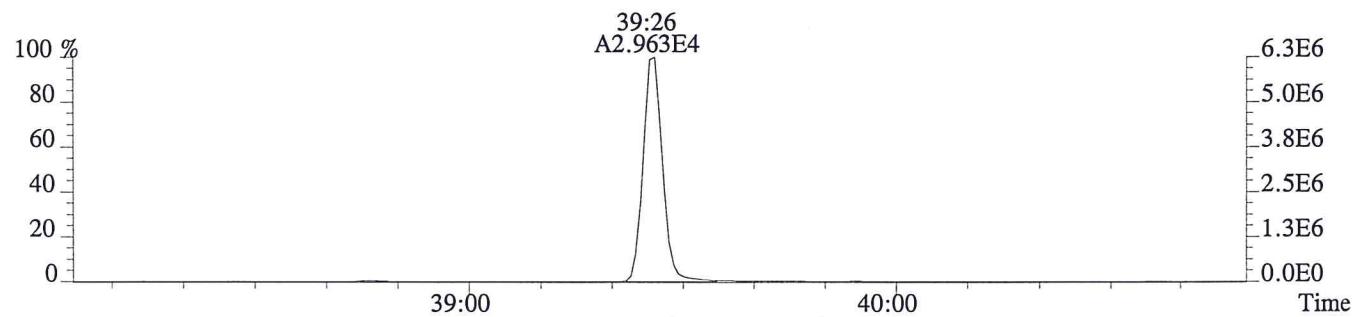
File:P600967 #1-316 Acq:14-OCT-2015 12:45:45 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:EQ1500602-03  
 389.8157 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1016.0,0.40%,F,T)



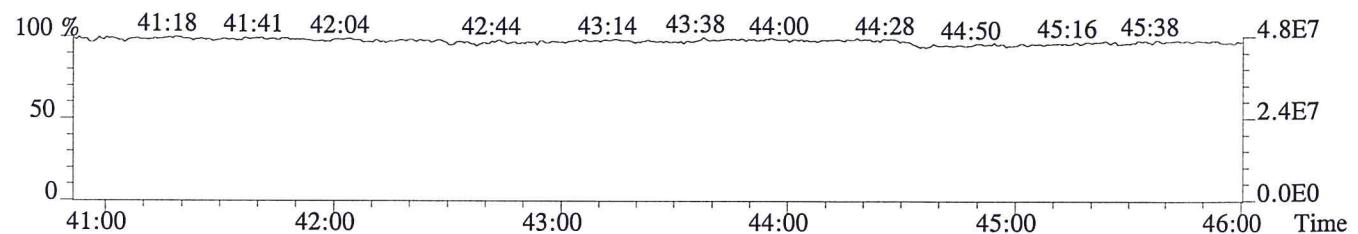
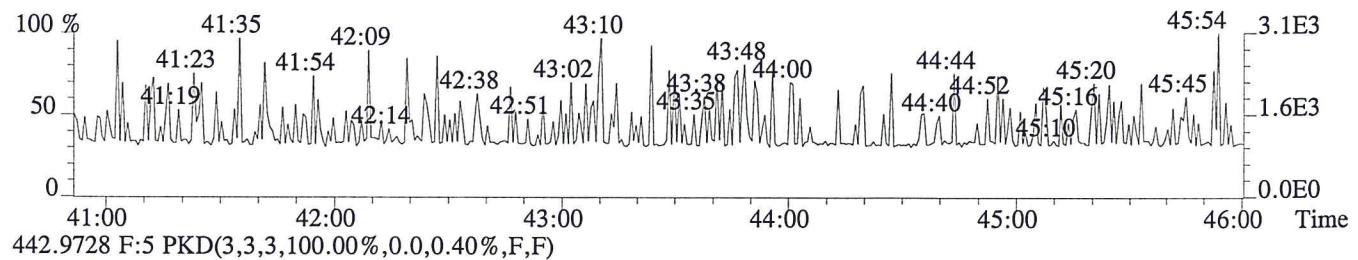
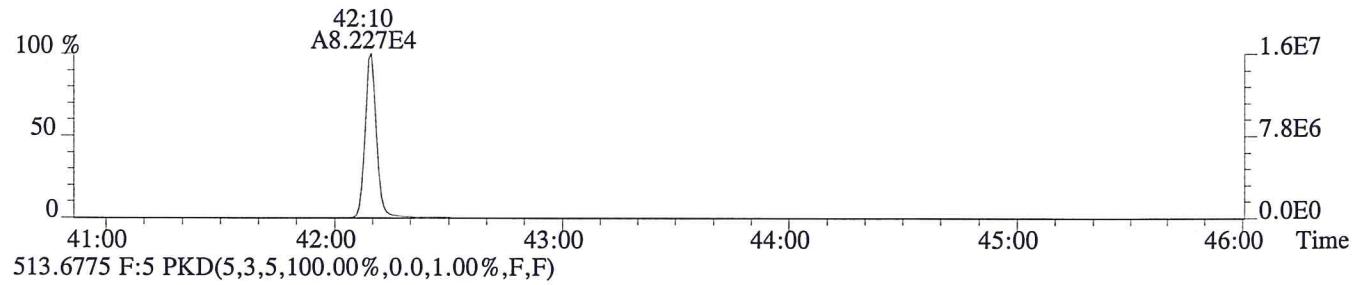
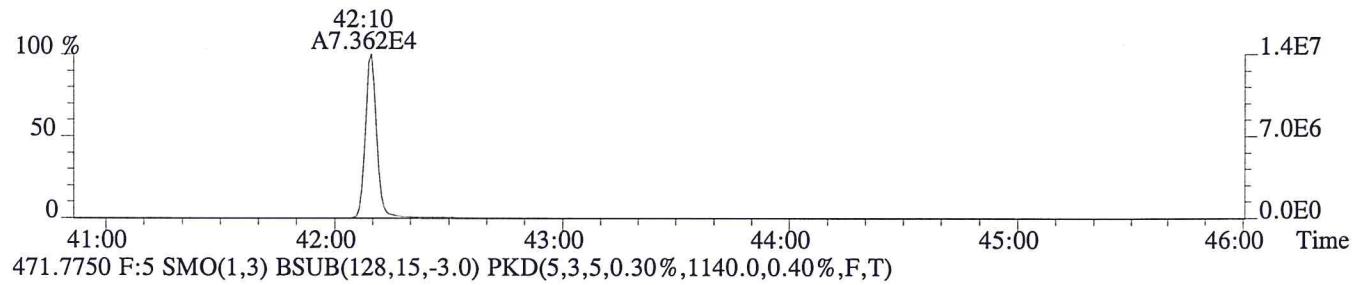
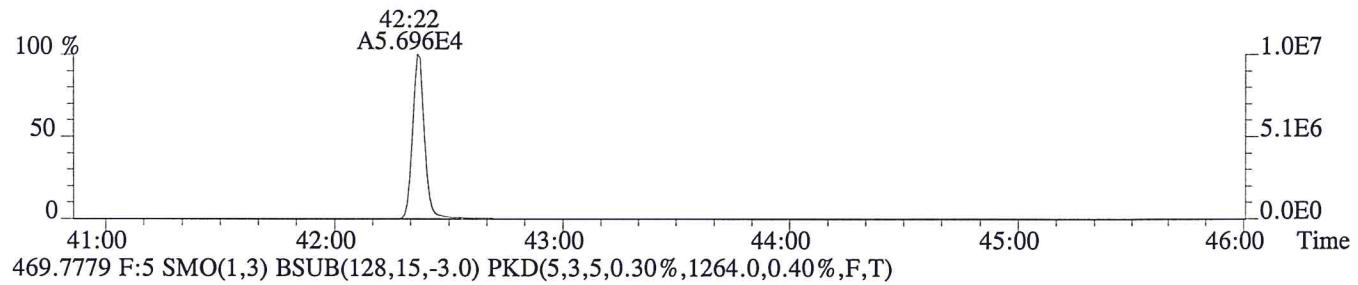
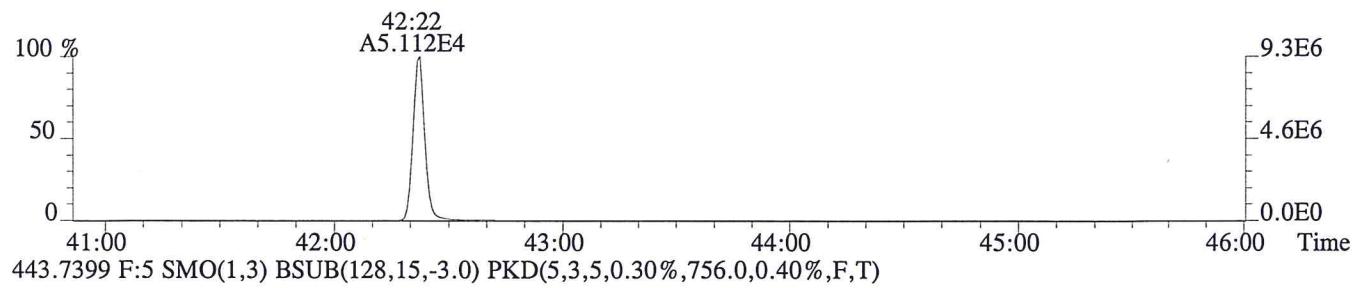
File:P600967 #1-248 Acq:14-OCT-2015 12:45:45 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:EQ1500602-03  
 407.7818 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,2808.0,0.50%,F,T)



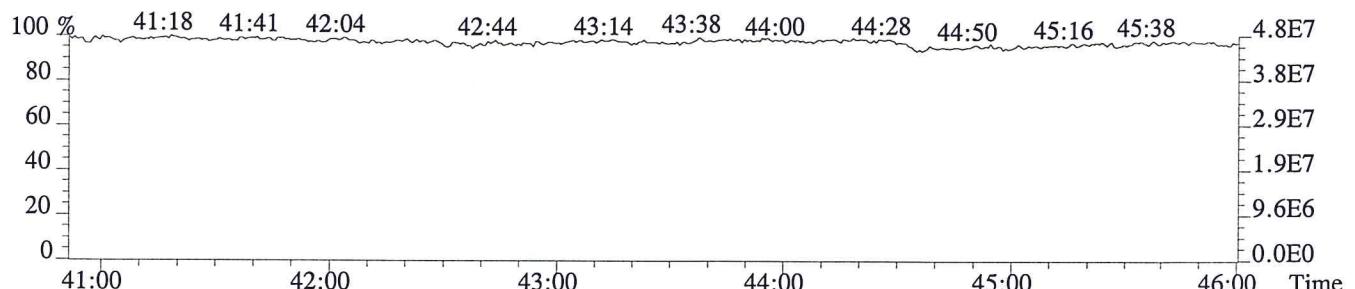
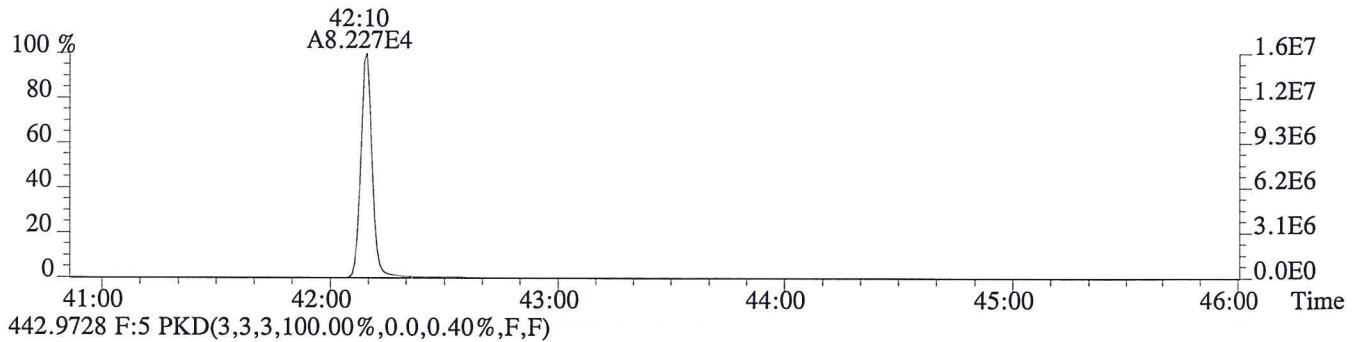
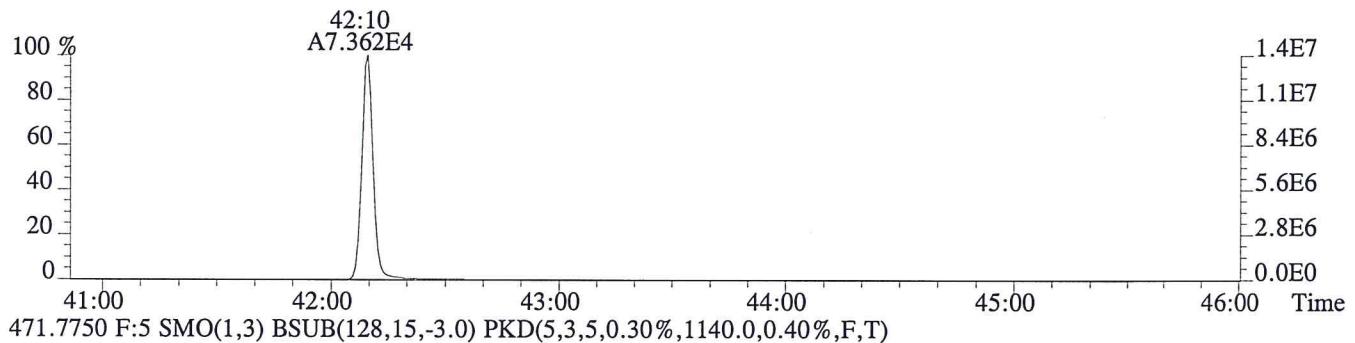
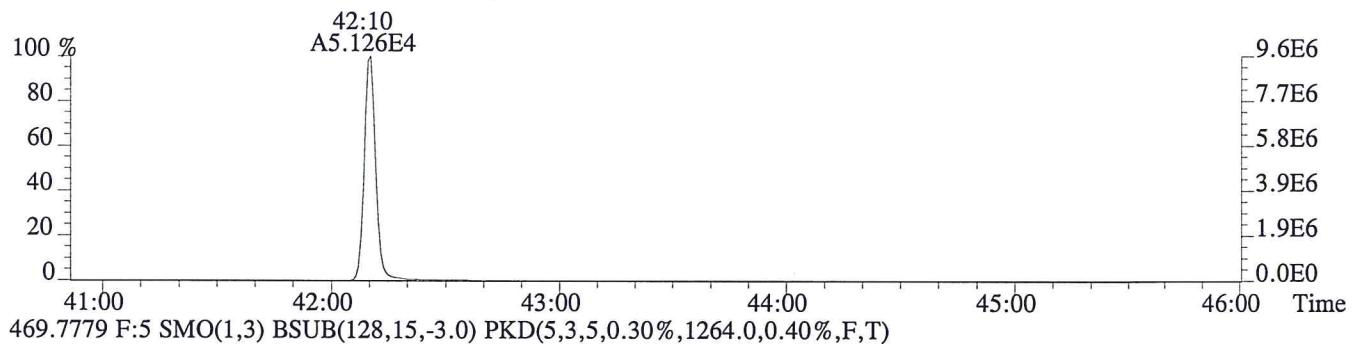
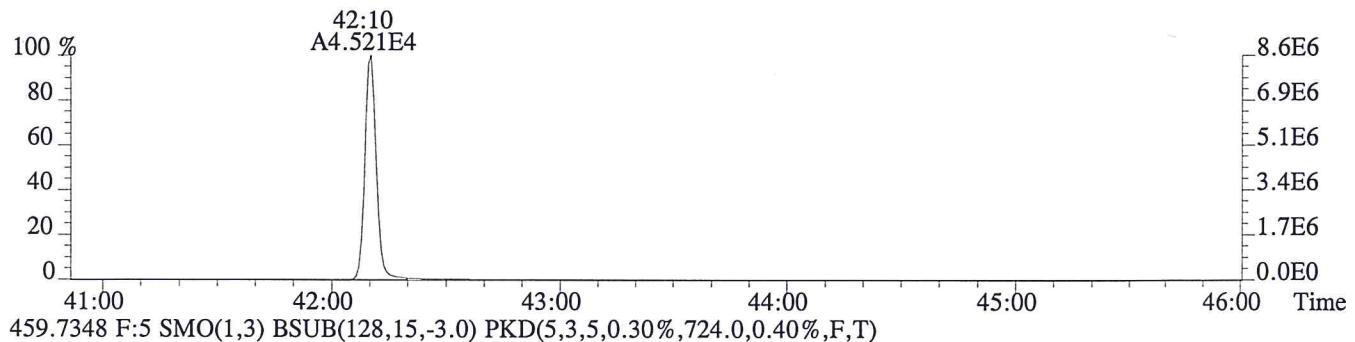
File:P600967 #1-248 Acq:14-OCT-2015 12:45:45 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:EQ1500602-03  
 423.7766 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1132.0,0.40%,F,T)



File:P600967 #1-464 Acq:14-OCT-2015 12:45:45 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:EQ1500602-03  
 441.7428 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,612.0,0.40%,F,T)



File:P600967 #1-464 Acq:14-OCT-2015 12:45:45 Probe EI+ Magnet SIR VG BioTech Mass spectf  
Sample#1 Exp:EQ1500602-03  
457.7377 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,476.0,0.40%,F,T)





# Continuing Calibration

**ALS Environmental - Houston HRMS**  
10450 Stancliff Rd., Suite 210, Houston, TX 77099  
Phone (713)266-1599 Fax (713)266-0130  
[www.alsglobal.com](http://www.alsglobal.com)

RIGHT SOLUTIONS | RIGHT PARTNER

# CCAL HRCC3/CS3 Daily Calibration QC Checklist

Calibration File Name: P600911

Date: 10/12/17

Circle one:  
 Beginning /  Ending

Method: 1613 / 1613E / 8290 / VCP / Tetra / TCDD Only / TCDF Conf / VCP Conf / 8280 / M23 / TO-9A

Retention Window/Column Performance Check:

Analyst

Second Check

Windows in and first and last eluters labeled	✓	✓
Column Performance shows less than or equal to 25% valley between column specific 2378 isomer and its closest eluters	✓	✓
No QC ion deflections affect column specific 2378 isomer or its closest eluters (HRMS Only)	✓	✓

CS3 Continuing Calibration

Analyst

Second Check

Percent RSD within method criteria	✓	✓
All relative abundance ratios meet method criteria	✓	✓
No QC ion deflections of greater than 20% (HRMS Only)	✓	✓
Mass spectrometer resolution greater than or equal to 10,000 and documented (HRMS Only)	✓	✓
2378-TCDD elutes at 25 minutes or later on the DB-5 column / DB-5MSUI column	✓	✓
Signal-to-noise of all target analytes and their labeled standards at least 10:1	✓	✓
Valley between labeled 123478 and 123678 HxCDD peaks less than or equal to 50% (LRMS Only)	N/A	N/A
Ending Calibration injected prior to end of 12 hour clock	N/A	N/A

Analyst: JC

Second QC: LKL

5DBC  
PCDD/PCDF/PCB ANALYTICAL SEQUENCE SUMMARY

Lab Name: ALS Environmental

Contract:

Lab Code: ALS-TX

Case No.:

SDG No.:

GC column: DB-5MSUI

ID: 0.25 (mm)

Instrument ID: E-HRMS-08

Init. Calib. Date: 08/19/15

Init. Calib.Times: 10:52

THE ANALYTICAL SEQUENCE OF STANDARDS, SAMPLES, BLANKS, AND LABORATORY CONTROL SAMPLES (LCSS) IS AS FOLLOWS:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
84084	WINDOW DEFINE	P600912	12-OCT-15	11:10:35
84080	CS3	P600911	12-OCT-15	09:51:43
METHOD BLANK	EQ1500599-01	P600913	12-OCT-15	13:08:17
MIXED PRESSED SLUD	J1507732-003	P600914	12-OCT-15	13:56:05
BOILER WOOD FLY ASH	J1507732-004	P600915	12-OCT-15	14:45:10
10615148	E1500939-001	P600916	12-OCT-15	16:04:53
2096625 001	E1500947-001	P600917	12-OCT-15	17:09:10
1R	E1500972-001	P600918	12-OCT-15	17:57:00
1H	E1500973-001	P600919	12-OCT-15	18:46:02
15J0011-01	E1500990-001	P600920	12-OCT-15	19:35:03
5195B01BA	E1500859-001RE	P600921	12-OCT-15	20:24:09
5226B01BA	E1500859-002RE	P600922	12-OCT-15	21:13:08

## Sample List Report

## MassLynx 4.1 SCN815 SCN795

Sample List: C:\MassLynx\EHRMS08.PRO\SampleDB\20151012.SPL  
 Last Modified: Tuesday, October 13, 2015 11:48:07 Eastern Daylight Time  
 Printed: Tuesday, October 13, 2015 11:51:56 Eastern Daylight Time

Page 1 of 2

Page Position (1, 1)

OP05-2 : P600911/PES

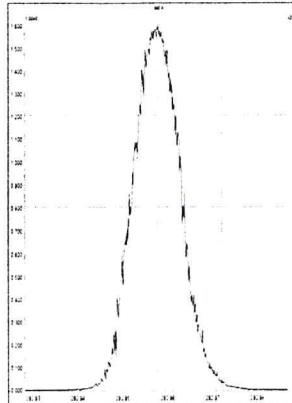
	Date	Time	File Name	Lab Sample ID	Client File Text	Bottle	MS File	Inlet File	Analyst	Comments
1	10/12/15	09:51	P600911	84080	CS3	Tray1:1	EPA1613_ALS	Dioxin_ALS	XO	HRMS check 09:46
2		11:10	P600912	84084	WD	Tray1:2	EPA1613_ALS	Dioxin_ALS		
3		13:08	P600913	EQ1500599-01	MB	Tray1:3	EPA1613_ALS	Dioxin_ALS		HRMS Check 13:04
4		13:56	P600914	J1507732-003	J1507732-003	Tray1:4	EPA1613_ALS	Dioxin_ALS		
5		14:45	P600915	J1507732-004	J1507732-004	Tray1:5	EPA1613_ALS	Dioxin_ALS		
6		16:04	P600916	E1500939-001	E1500939-001	Tray1:6	EPA1613_ALS	Dioxin_ALS		
7		17:09	P600917	E1500947-001	E1500947-001	Tray1:7	EPA1613_ALS	Dioxin_ALS		
8		17:57	P600918	E1500972-001	E1500972-001	Tray1:8	EPA1613_ALS	Dioxin_ALS		
9		18:46	P600919	E1500973-001	E1500973-001	Tray1:9	EPA1613_ALS	Dioxin_ALS		
10		19:35	P600920	E1500990-001	E1500990-001	Tray1:10	EPA1613_ALS	Dioxin_ALS		
11		20:24	P600921	E1500859-001RE	E1500859-001RE	Tray1:11	EPA1613_ALS	Dioxin_ALS		
12		21:13	P600922	E1500859-002RE	E1500859-002RE	Tray1:12	EPA1613_ALS	Dioxin_ALS		
13		22:02	P600923	TEST	TEST	Tray1:13	EPA1613_ALS	Dioxin_ALS		
14	V	22:51	P600924	84080	CS3	Tray1:14	EPA1613_ALS	Dioxin_ALS		HRMS check 12:22
15					---	Tray1:15	EPA1613_ALS	Dioxin_ALS		
16					---	Tray1:16	EPA1613_ALS	Dioxin_ALS		
17					---	Tray1:17	EPA1613_ALS	Dioxin_ALS		
18					---	Tray1:18	EPA1613_ALS	Dioxin_ALS		
19					---	Tray1:19	EPA1613_ALS	Dioxin_ALS		
20					---	Tray1:20	EPA1613_ALS	Dioxin_ALS		
21					---	Tray1:21	EPA1613_ALS	Dioxin_ALS		
22					---	Tray1:22	EPA1613_ALS	Dioxin_ALS		
23					---	Tray1:23	EPA1613_ALS	Dioxin_ALS		
24					---	Tray1:24	EPA1613_ALS	Dioxin_ALS		
25					---	Tray1:25	EPA1613_ALS	Dioxin_ALS		
26					---	Tray1:26	EPA1613_ALS	Dioxin_ALS		
27					---	Tray1:27	EPA1613_ALS	Dioxin_ALS		
28					---	Tray1:28	EPA1613_ALS	Dioxin_ALS		
29					---	Tray1:29	EPA1613_ALS	Dioxin_ALS		
30					---	Tray1:30	EPA1613_ALS	Dioxin_ALS		
31					---	Tray1:31	EPA1613_ALS	Dioxin_ALS		
32					---	Tray1:32	EPA1613_ALS	Dioxin_ALS		
33					---	Tray1:33	EPA1613_ALS	Dioxin_ALS		
34					---	Tray1:34	EPA1613_ALS	Dioxin_ALS		
35					TC 10/22/15	Tray1:35	EPA1613_ALS	Dioxin_ALS		
36					---	Tray1:36	EPA1613_ALS	Dioxin_ALS		
37					---	Tray1:37	EPA1613_ALS	Dioxin_ALS		
38					---	Tray1:38	EPA1613_ALS	Dioxin_ALS		
39					---	Tray1:39	EPA1613_ALS	Dioxin_ALS		

10/12/15

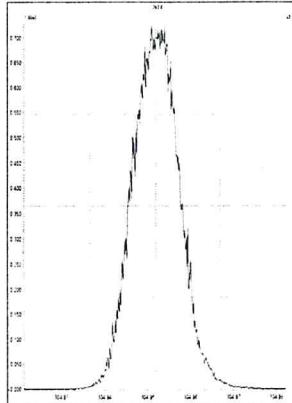
File: Experiment: EPA1613\_ALS.exp Reference: pfk.ref Function: 1 @ 200 (ppm)

Printed: Monday, October 12, 2015 09:46:00 Eastern Daylight Time

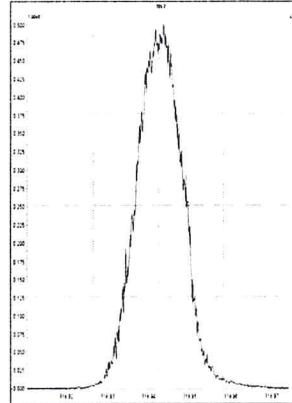
M 292.9824 R 12260



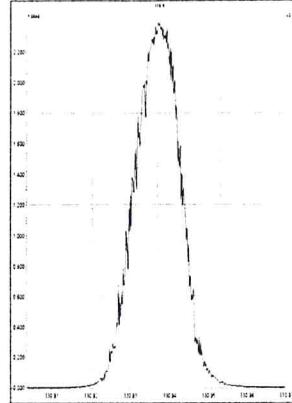
M 304.9824 R 12133



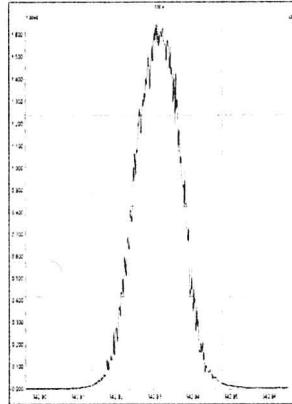
M 318.9792 R 12627



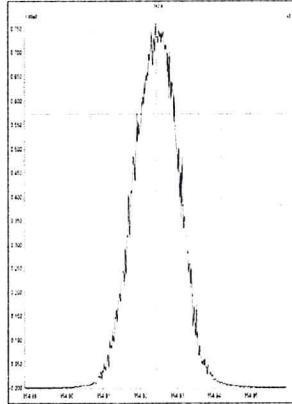
M 330.9792 R 13162



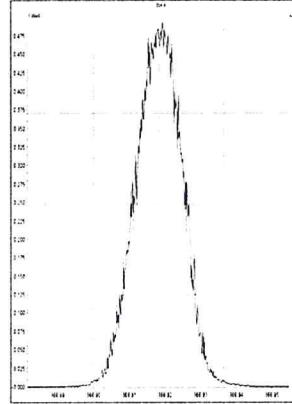
M 342.9792 R 13365



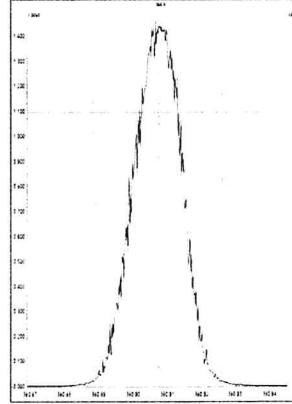
M 354.9792 R 12886



M 366.9792 R 12956

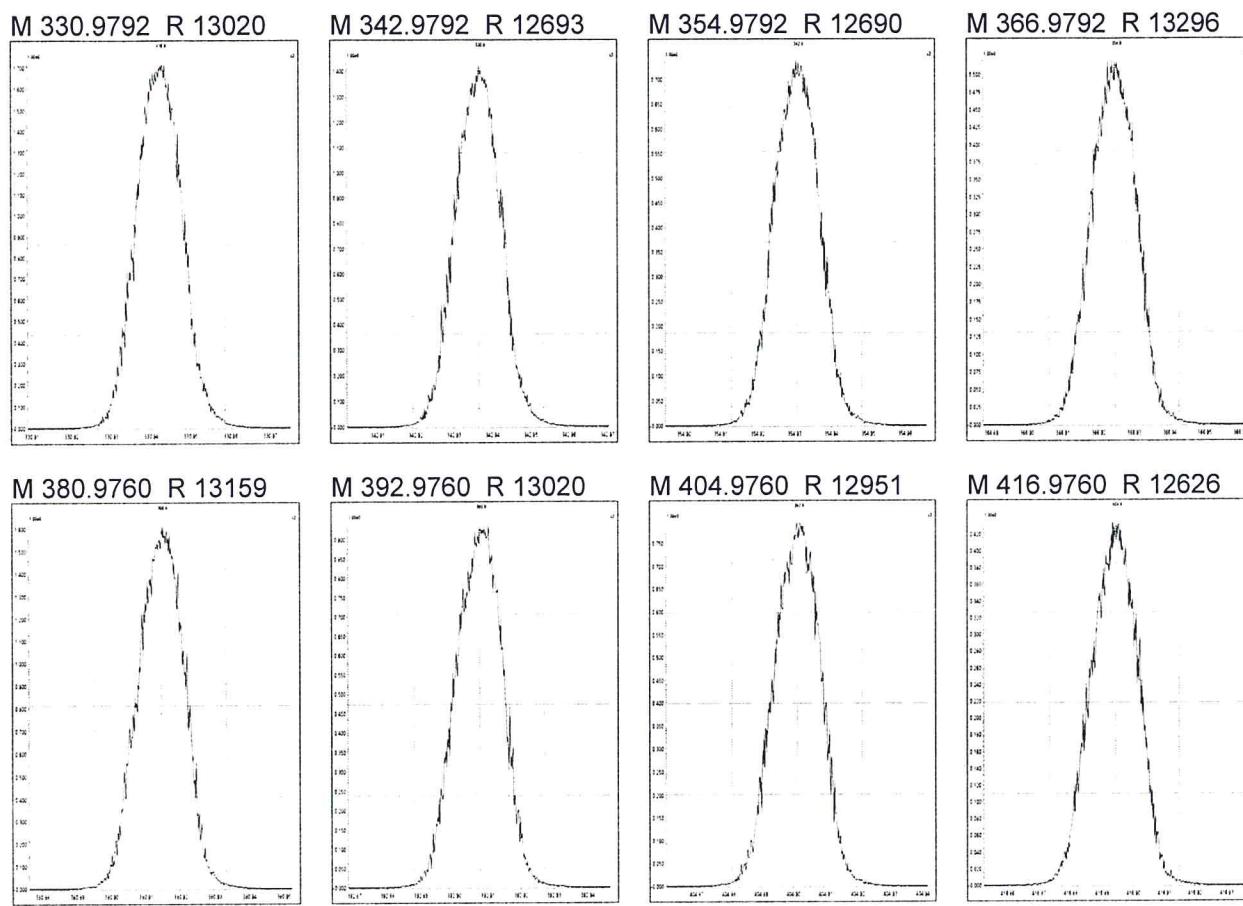


M 380.9760 R 12501



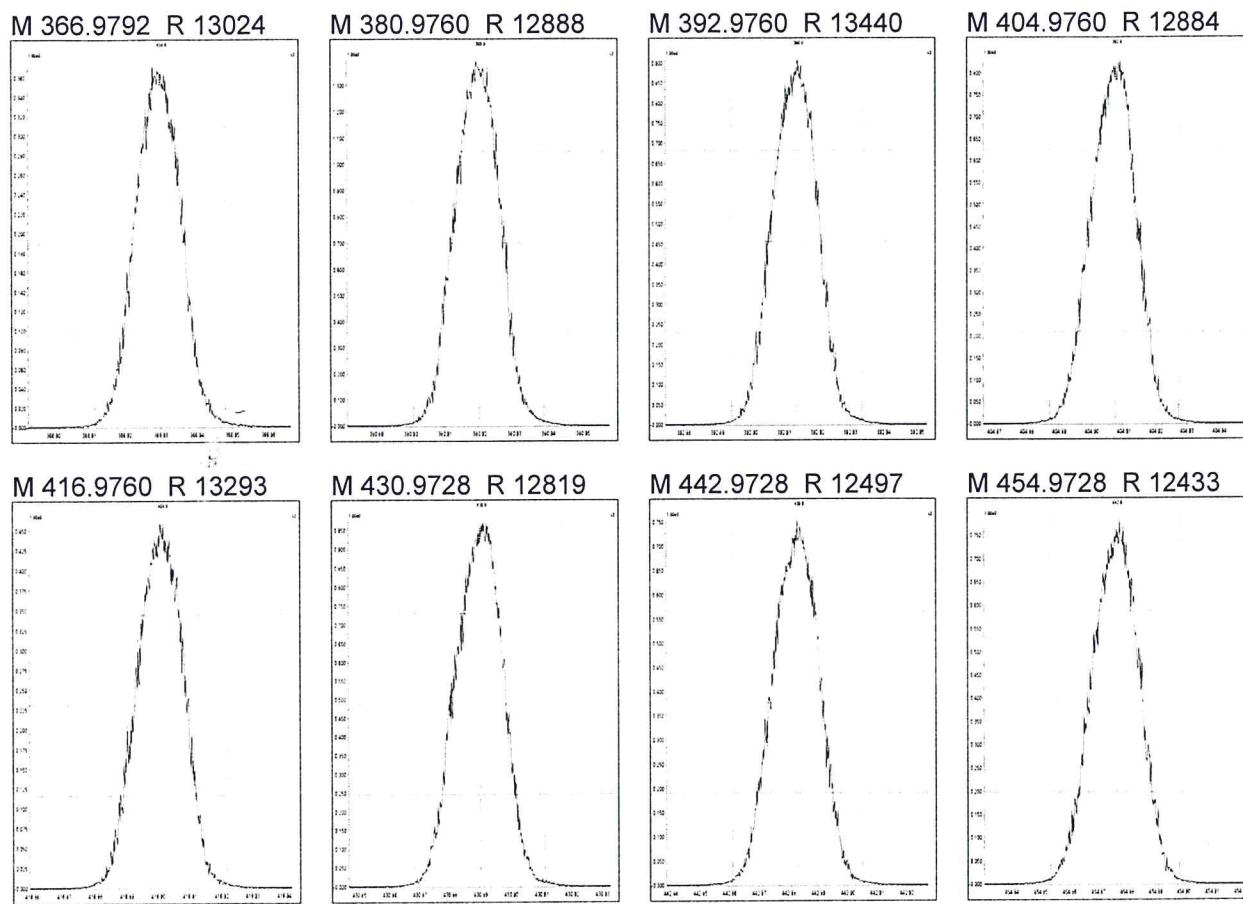
File: Experiment: EPA1613\_ALS.exp Reference: pfk.ref Function: 2 @ 200 (ppm)

Printed: Monday, October 12, 2015 09:46:48 Eastern Daylight Time



File: Experiment: EPA1613\_ALS.exp Reference: pfk.ref Function: 3 @ 200 (ppm)

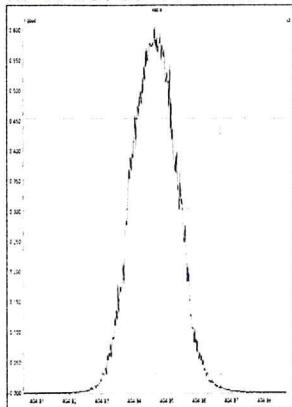
Printed: Monday, October 12, 2015 09:47:31 Eastern Daylight Time



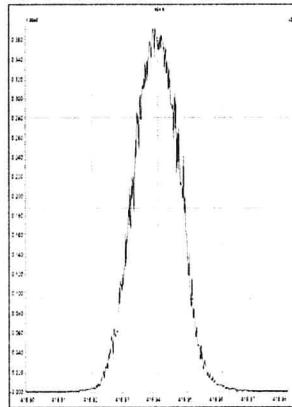
File: Experiment: EPA1613\_ALS.exp Reference: pfk.ref Function: 4 @ 200 (ppm)

Printed: Monday, October 12, 2015 09:48:08 Eastern Daylight Time

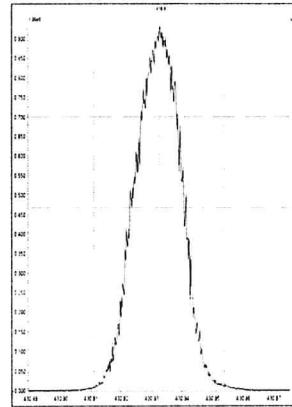
M 404.9760 R 12625



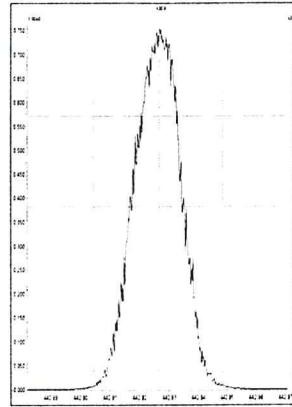
M 416.9760 R 12817



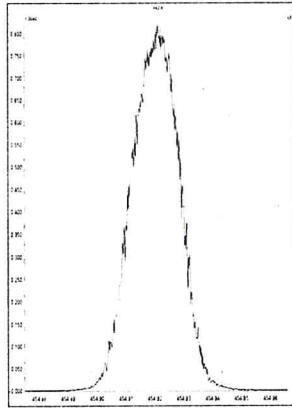
M 430.9728 R 12821



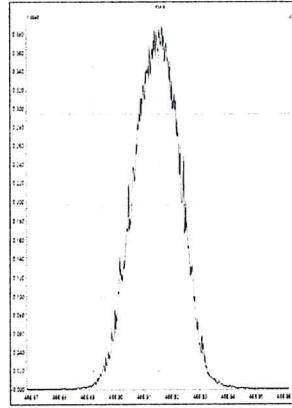
M 442.9728 R 13019



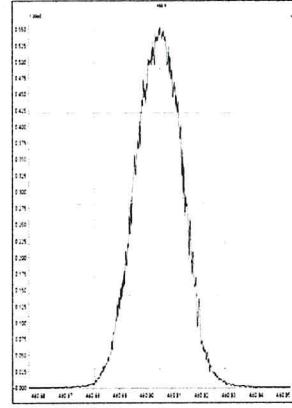
M 454.9728 R 12752



M 466.9728 R 12886



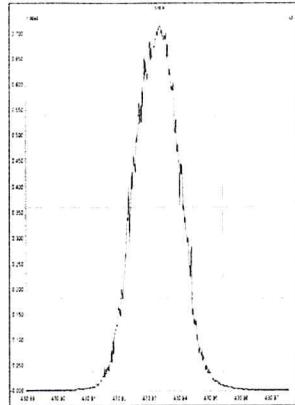
M 480.9696 R 12436



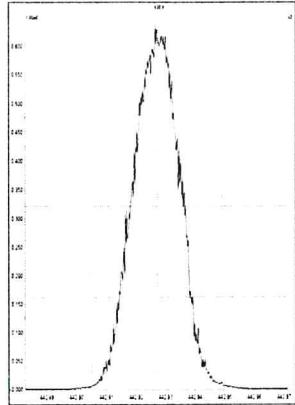
File: Experiment: EPA1613\_ALS.exp Reference: pfk.ref Function: 5 @ 200 (ppm)

Printed: Monday, October 12, 2015 09:50:02 Eastern Daylight Time

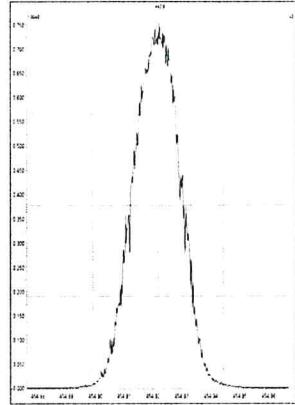
M 430.9728 R 12954



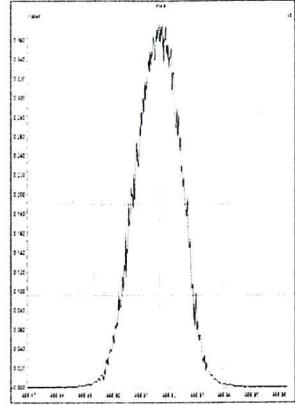
M 442.9728 R 13087



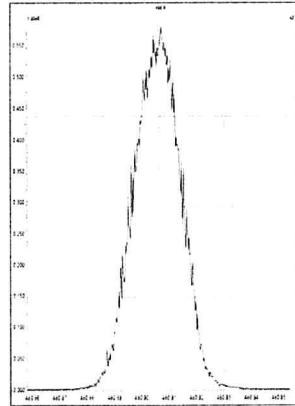
M 454.9728 R 13022



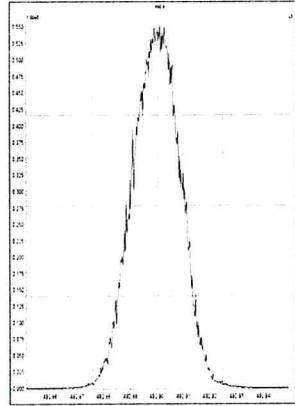
M 466.9728 R 13020



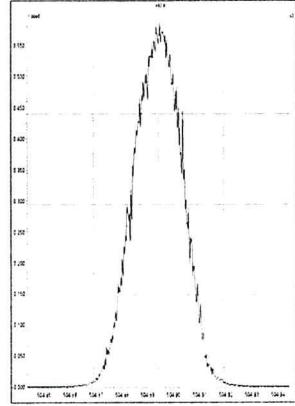
M 480.9696 R 12757



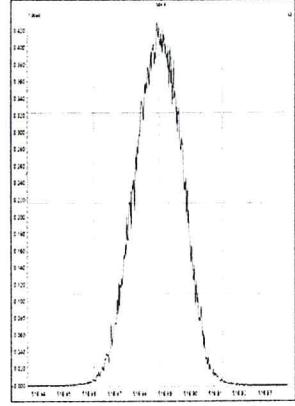
M 492.9696 R 12377



M 504.9696 R 12437



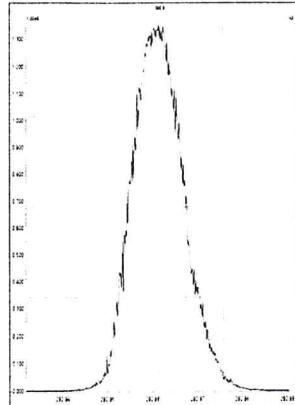
M 516.9697 R 12374



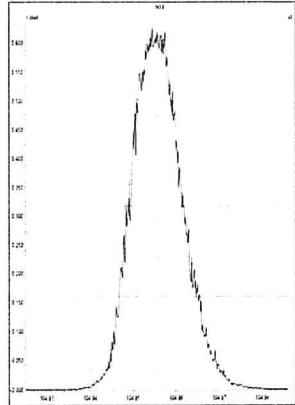
File: Experiment: EPA1613\_ALS.exp Reference: pfk.ref Function: 1 @ 200 (ppm)

Printed: Monday, October 12, 2015 13:04:58 Eastern Daylight Time

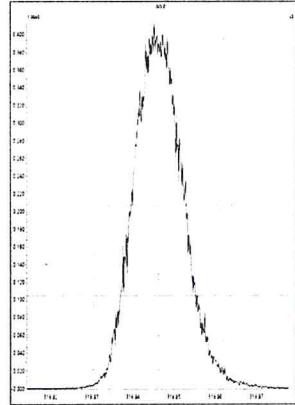
M 292.9824 R 11520



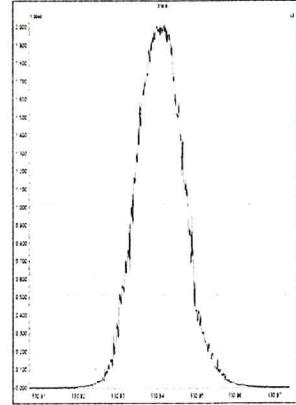
M 304.9824 R 11471



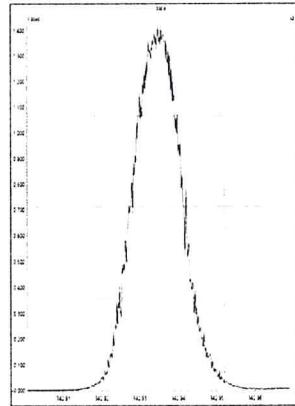
M 318.9792 R 11569



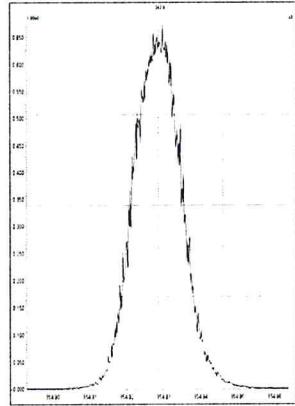
M 330.9792 R 12140



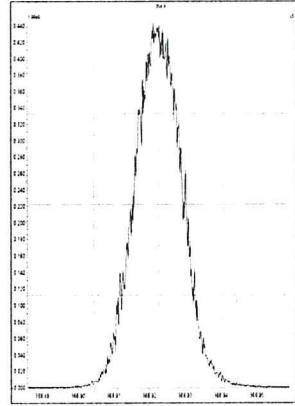
M 342.9792 R 11958



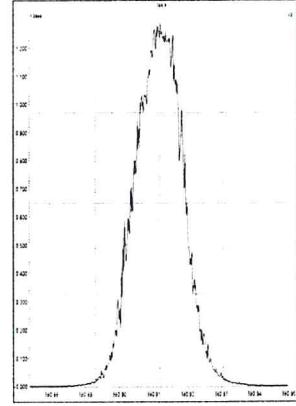
M 354.9792 R 12255



M 366.9792 R 12193

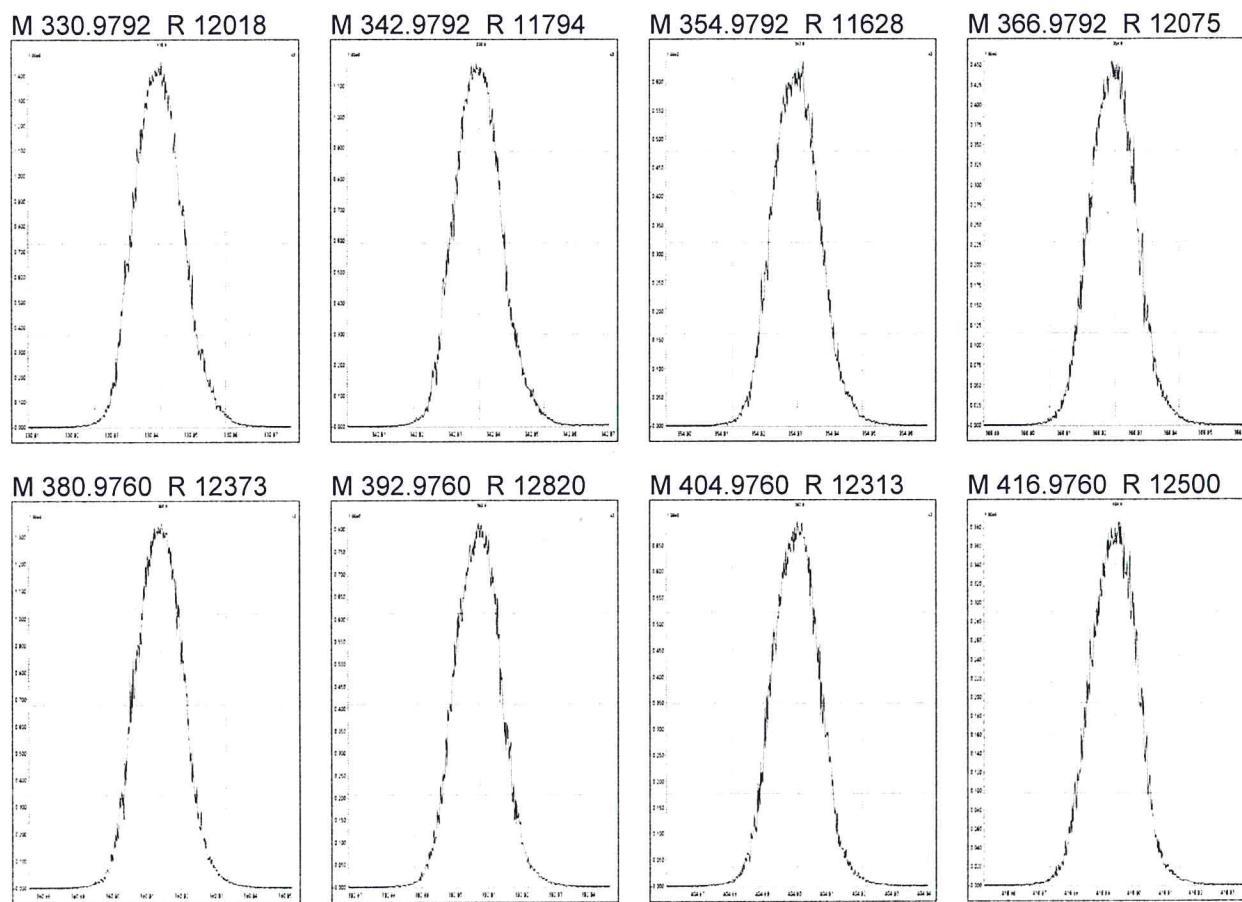


M 380.9760 R 12196



File: Experiment: EPA1613\_ALS.exp Reference: pkf.ref Function: 2 @ 200 (ppm)

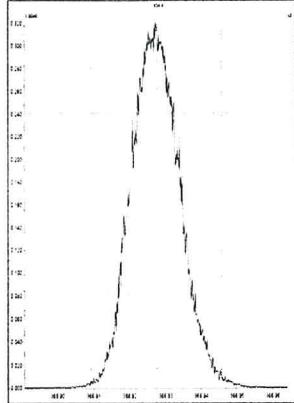
Printed: Monday, October 12, 2015 13:05:38 Eastern Daylight Time



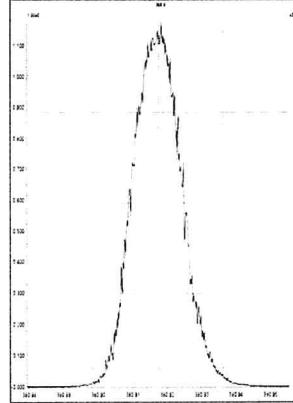
File: Experiment: EPA1613\_ALS.exp Reference: pfk.ref Function: 3 @ 200 (ppm)

Printed: Monday, October 12, 2015 13:06:17 Eastern Daylight Time

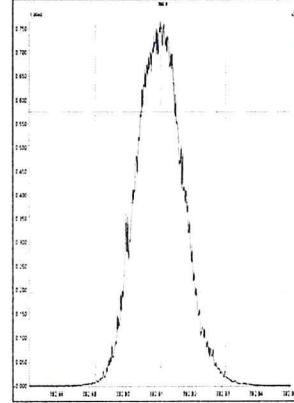
M 366.9792 R 11846



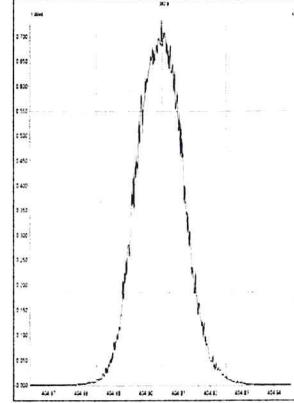
M 380.9760 R 12074



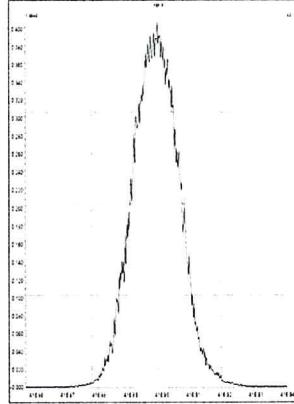
M 392.9760 R 11792



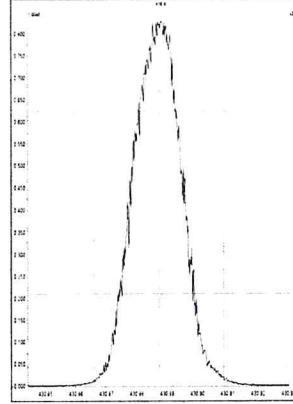
M 404.9760 R 12257



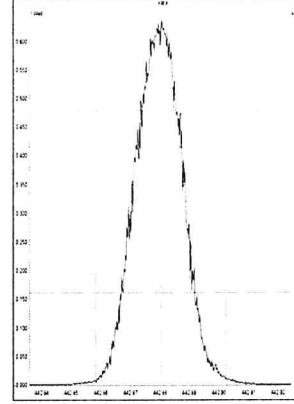
M 416.9760 R 12438



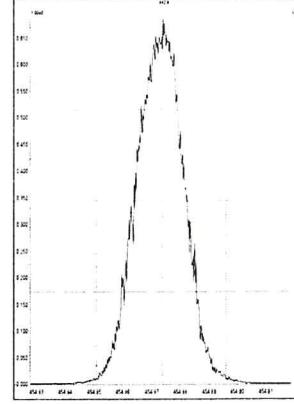
M 430.9728 R 12562



M 442.9728 R 12439



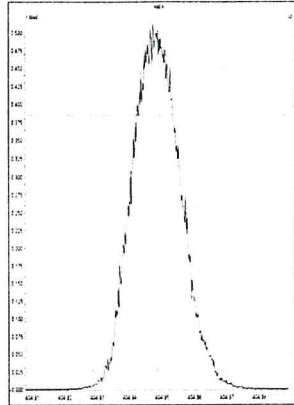
M 454.9728 R 12438



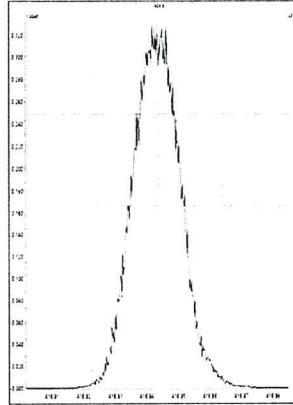
File: Experiment: EPA1613\_ALS.exp Reference: pfk.ref Function: 4 @ 200 (ppm)

Printed: Monday, October 12, 2015 13:06:54 Eastern Daylight Time

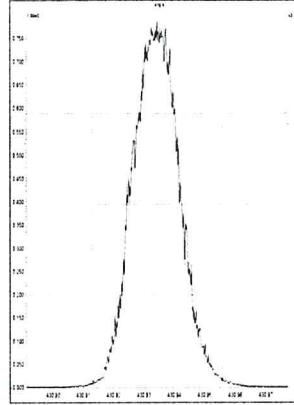
M 404.9760 R 11904



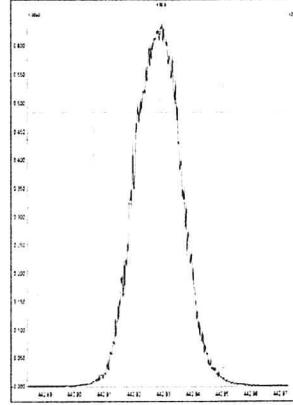
M 416.9760 R 12252



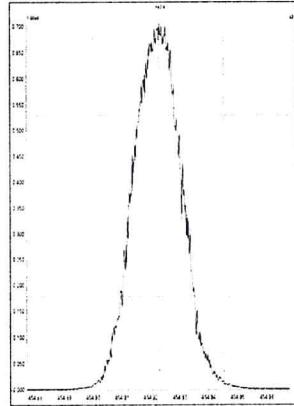
M 430.9728 R 12255



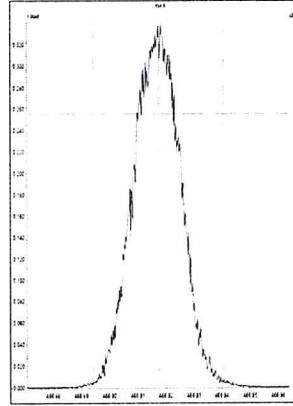
M 442.9728 R 12819



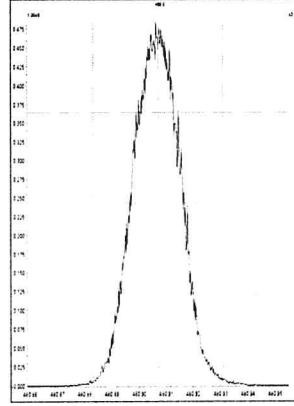
M 454.9728 R 12316



M 466.9728 R 12437



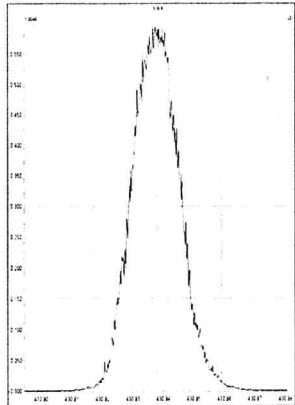
M 480.9696 R 12374



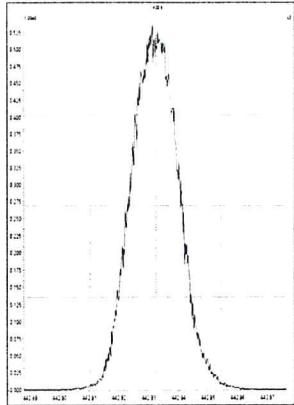
File: Experiment: EPA1613\_ALS.exp Reference: pfk.ref Function: 5 @ 200 (ppm)

Printed: Monday, October 12, 2015 13:07:36 Eastern Daylight Time

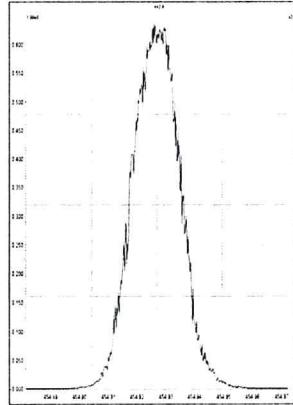
M 430.9728 R 11962



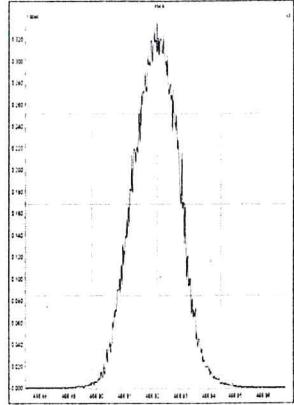
M 442.9728 R 12254



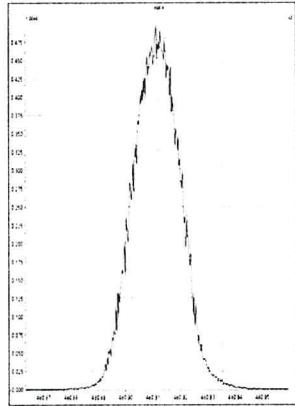
M 454.9728 R 12192



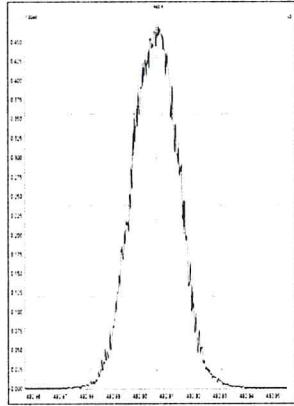
M 466.9728 R 12562



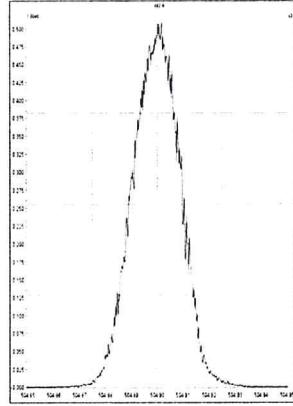
M 480.9696 R 12498



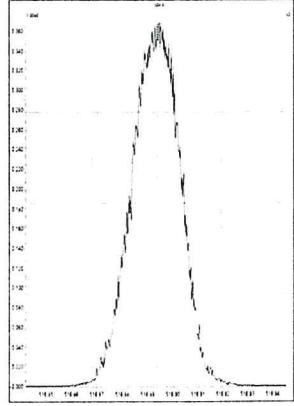
M 492.9696 R 12377



M 504.9696 R 12318



M 516.9697 R 12193



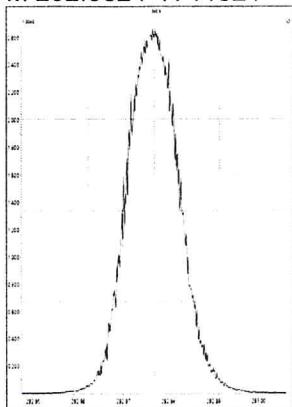
File:

Experiment: EPA1613\_ALS.exp Reference: pfk.ref Function: 1 @ 200 (ppm)

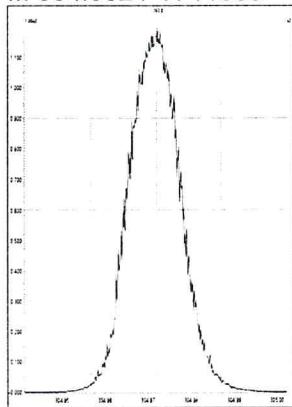
Printed:

Tuesday, October 13, 2015 12:22:41 Eastern Daylight Time

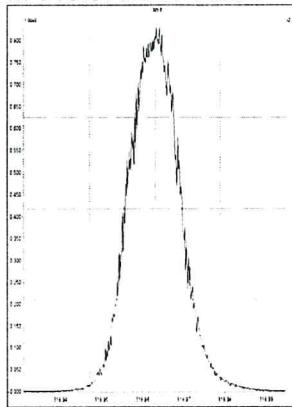
M 292.9824 R 11521



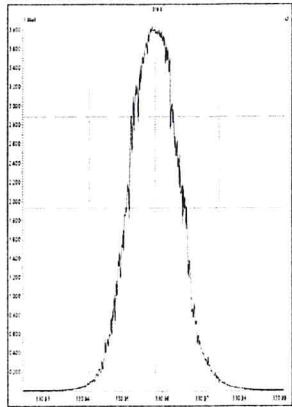
M 304.9824 R 11680



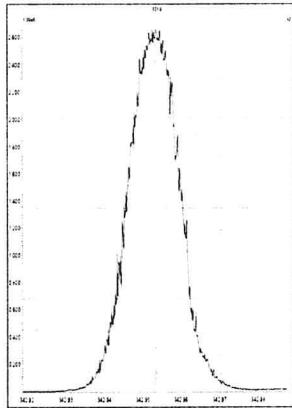
M 318.9792 R 11684



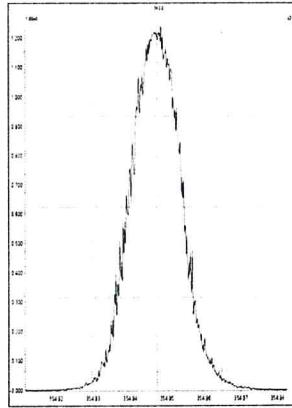
M 330.9792 R 11682



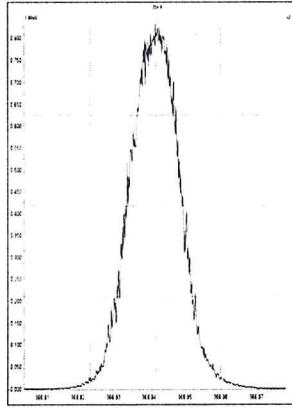
M 342.9792 R 11625



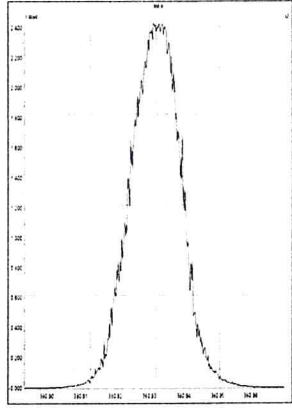
M 354.9792 R 11313



M 366.9792 R 11519



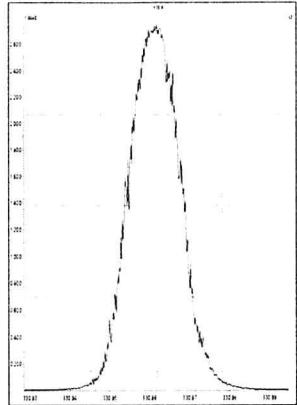
M 380.9760 R 11850



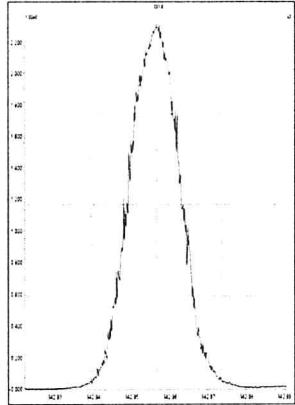
File: Experiment: EPA1613\_ALS.exp Reference: pfk.ref Function: 2 @ 200 (ppm)

Printed: Tuesday, October 13, 2015 12:23:33 Eastern Daylight Time

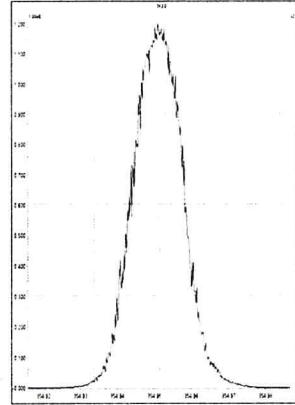
M 330.9792 R 11682



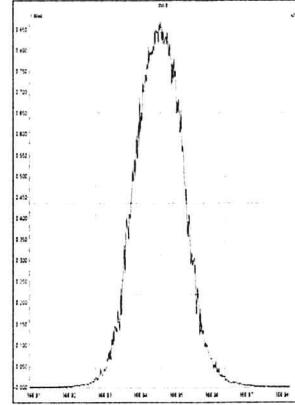
M 342.9792 R 11465



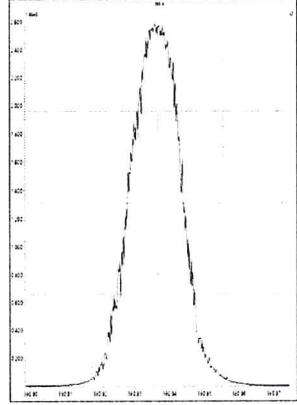
M 354.9792 R 11793



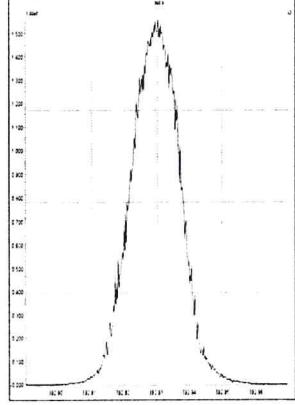
M 366.9792 R 12134



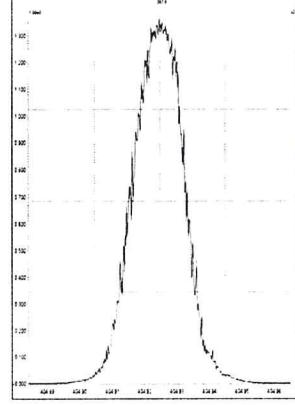
M 380.9760 R 12021



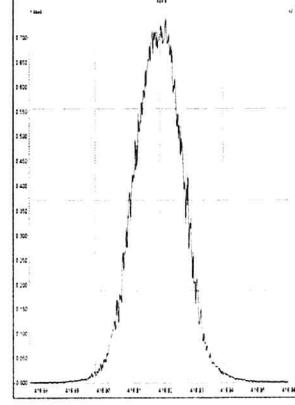
M 392.9760 R 11962



M 404.9760 R 11572



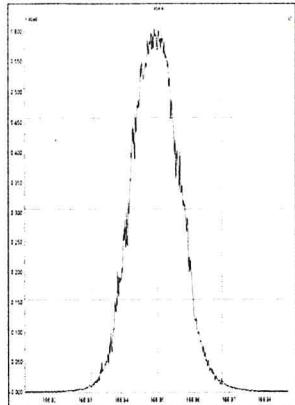
M 416.9760 R 11624



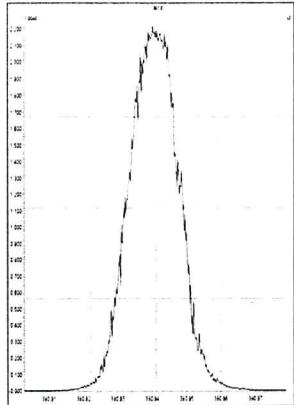
File: Experiment: EPA1613\_ALS.exp Reference: pfk.ref Function: 3 @ 200 (ppm)

Printed: Tuesday, October 13, 2015 12:24:13 Eastern Daylight Time

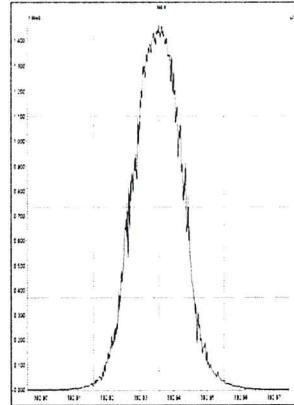
M 366.9792 R 11681



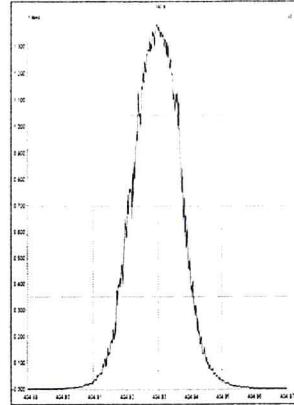
M 380.9760 R 12435



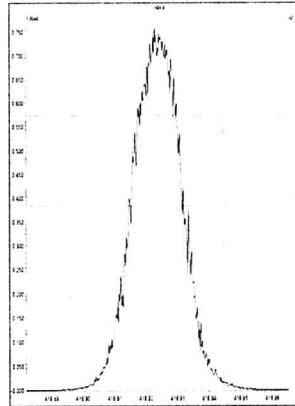
M 392.9760 R 12077



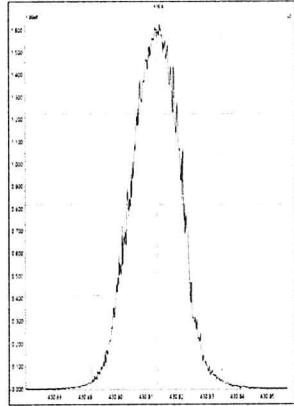
M 404.9760 R 11847



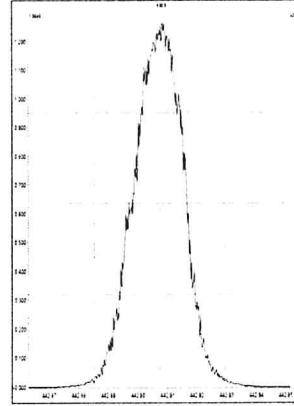
M 416.9760 R 11958



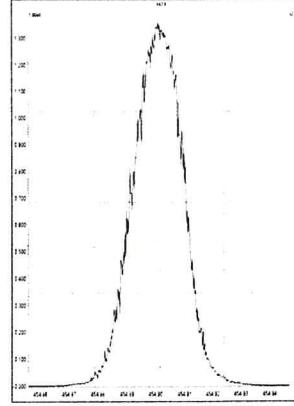
M 430.9728 R 12195



M 442.9728 R 12017



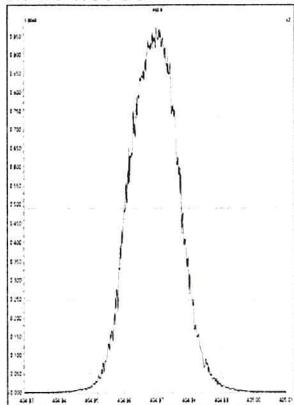
M 454.9728 R 11849



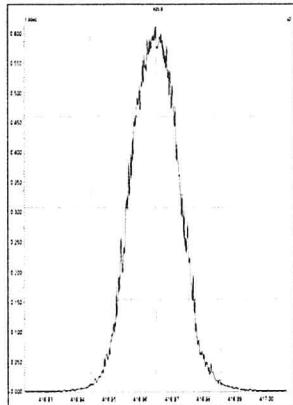
File: Experiment: EPA1613\_ALS.exp Reference: pfk.ref Function: 4 @ 200 (ppm)

Printed: Tuesday, October 13, 2015 12:24:49 Eastern Daylight Time

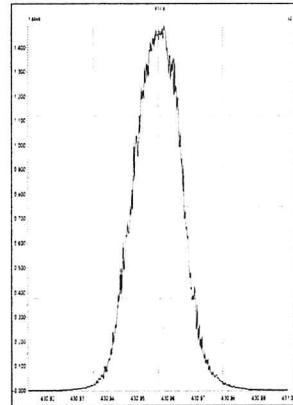
M 404.9760 R 12019



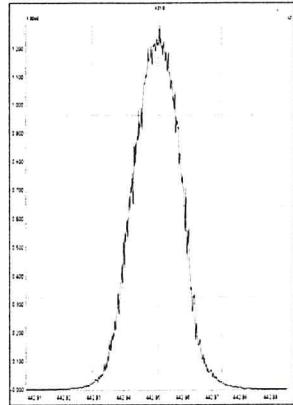
M 416.9760 R 12138



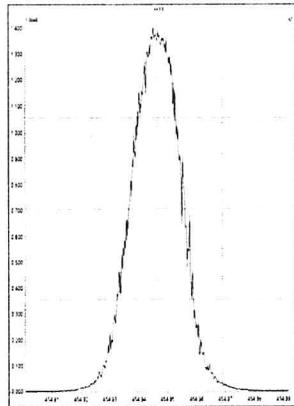
M 430.9728 R 12316



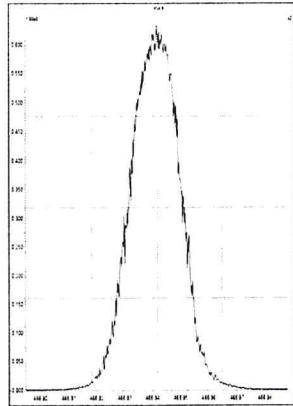
M 442.9728 R 12437



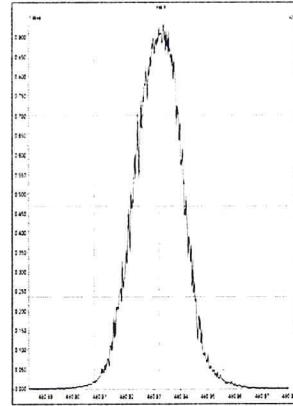
M 454.9728 R 12134



M 466.9728 R 12136



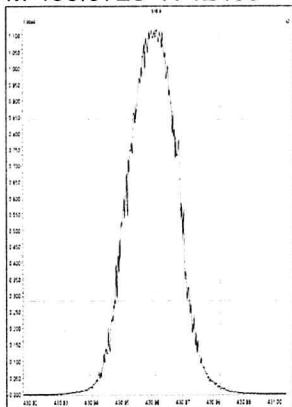
M 480.9696 R 12018



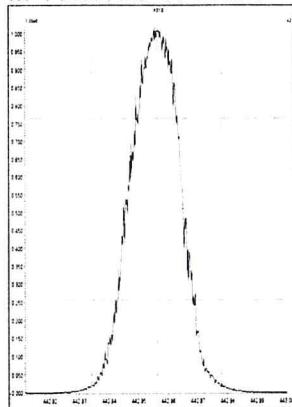
File: Experiment: EPA1613\_ALS.exp Reference: pfk.ref Function: 5 @ 200 (ppm)

Printed: Tuesday, October 13, 2015 12:25:31 Eastern Daylight Time

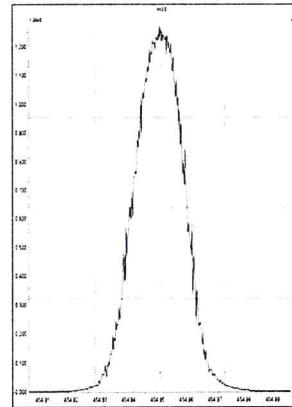
M 430.9728 R 12439



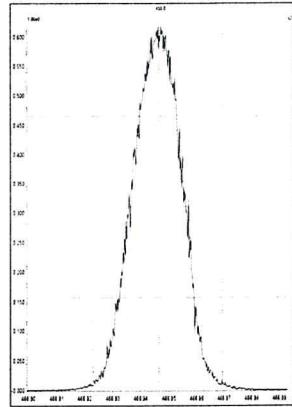
M 442.9728 R 12194



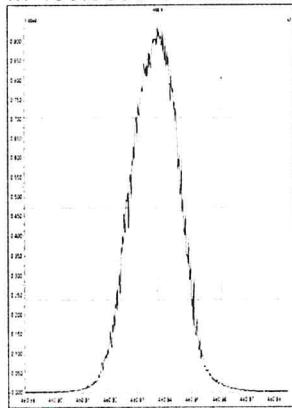
M 454.9728 R 12440



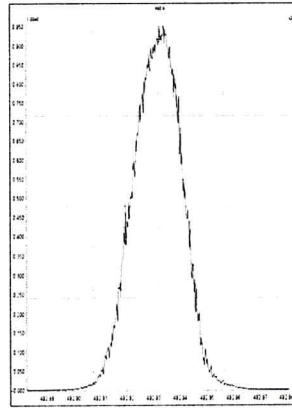
M 466.9728 R 12372



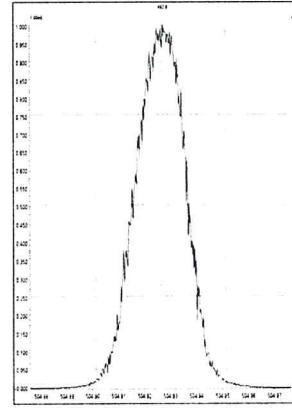
M 480.9696 R 12018



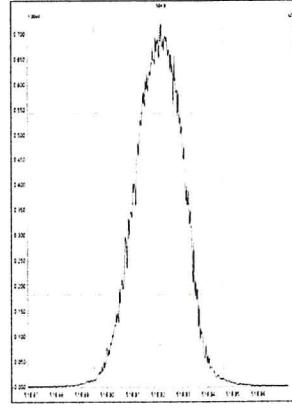
M 492.9696 R 12378



M 504.9696 R 12255



M 516.9697 R 11903



## WINDOW DEFINING MIX SUMMARY

**CLIENT ID:**

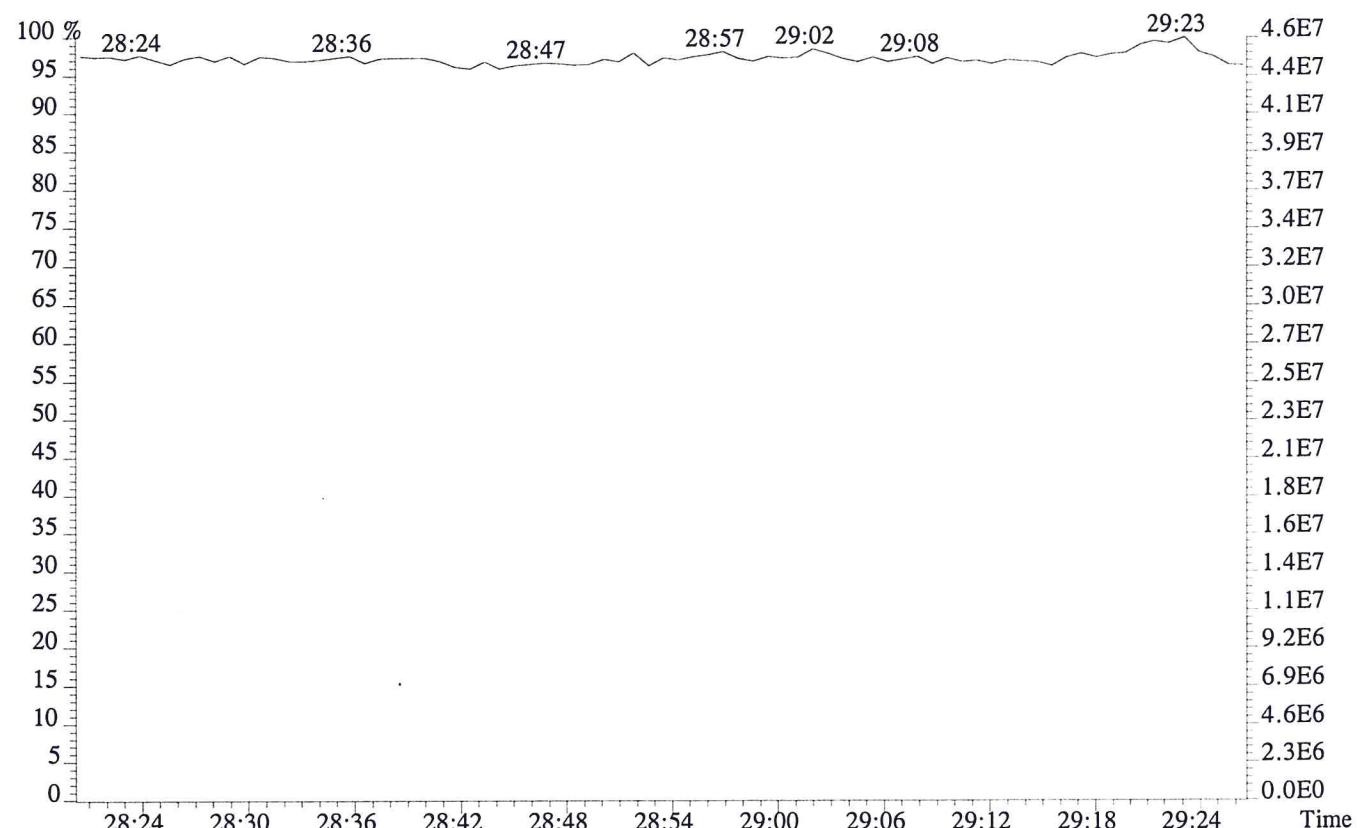
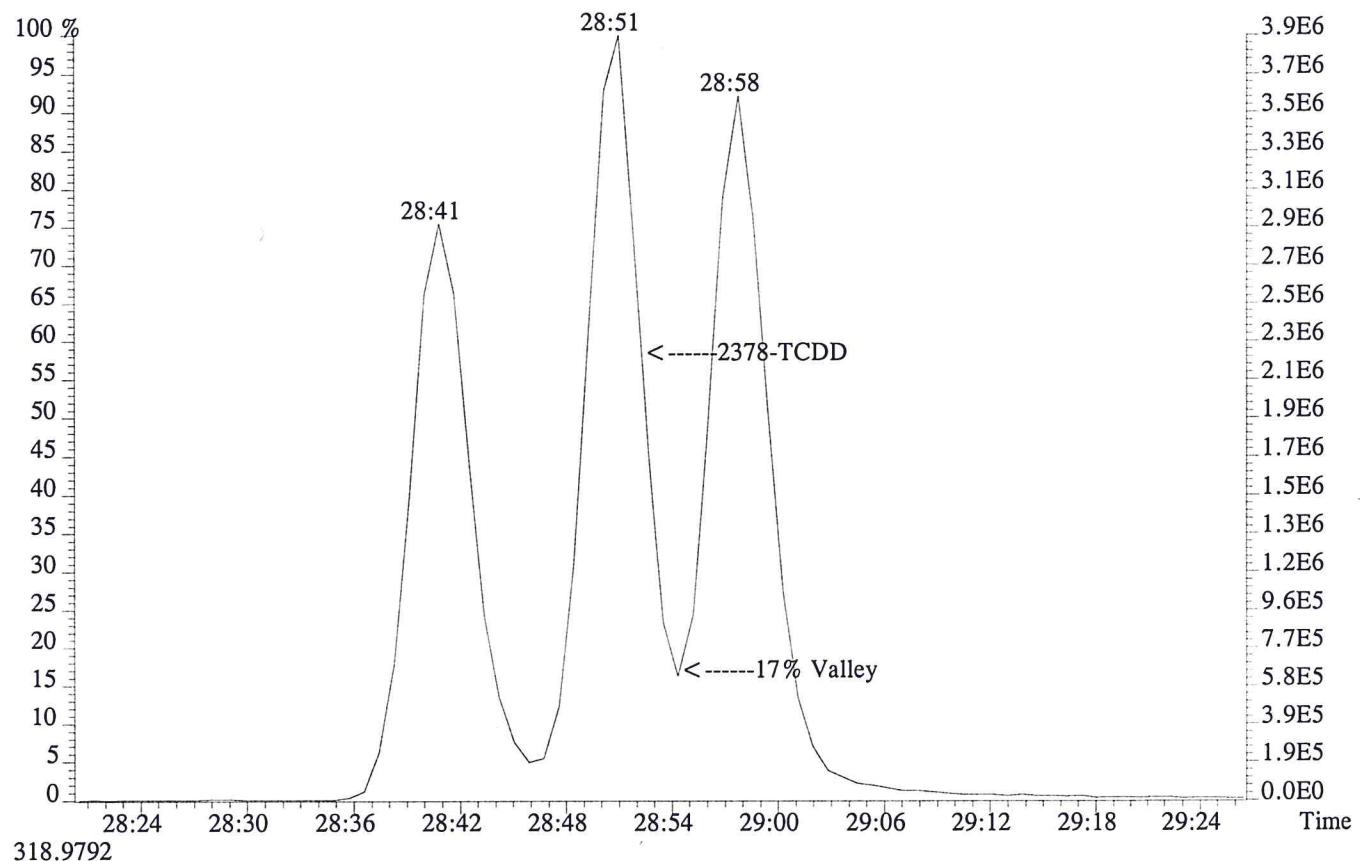
WDM

Lab Name: ALS Environmental Case No.: SDG No.:  
Lab Code: ALSTX ID: 0.25 (mm) Lab File ID: P600912  
GC Column: DB-5MSUI Date Analyzed: 12-OCT-2015  
Time Analyzed: 11:10:35

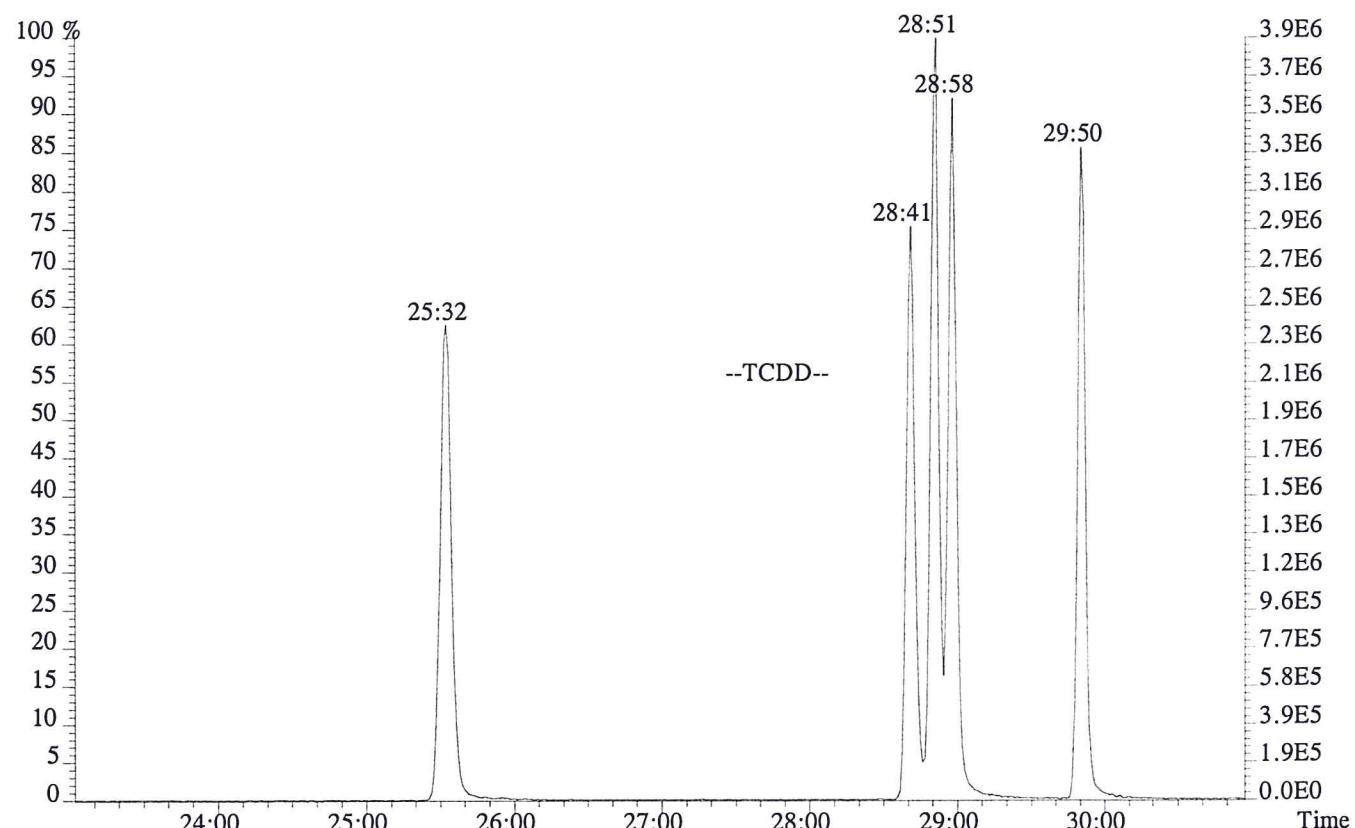
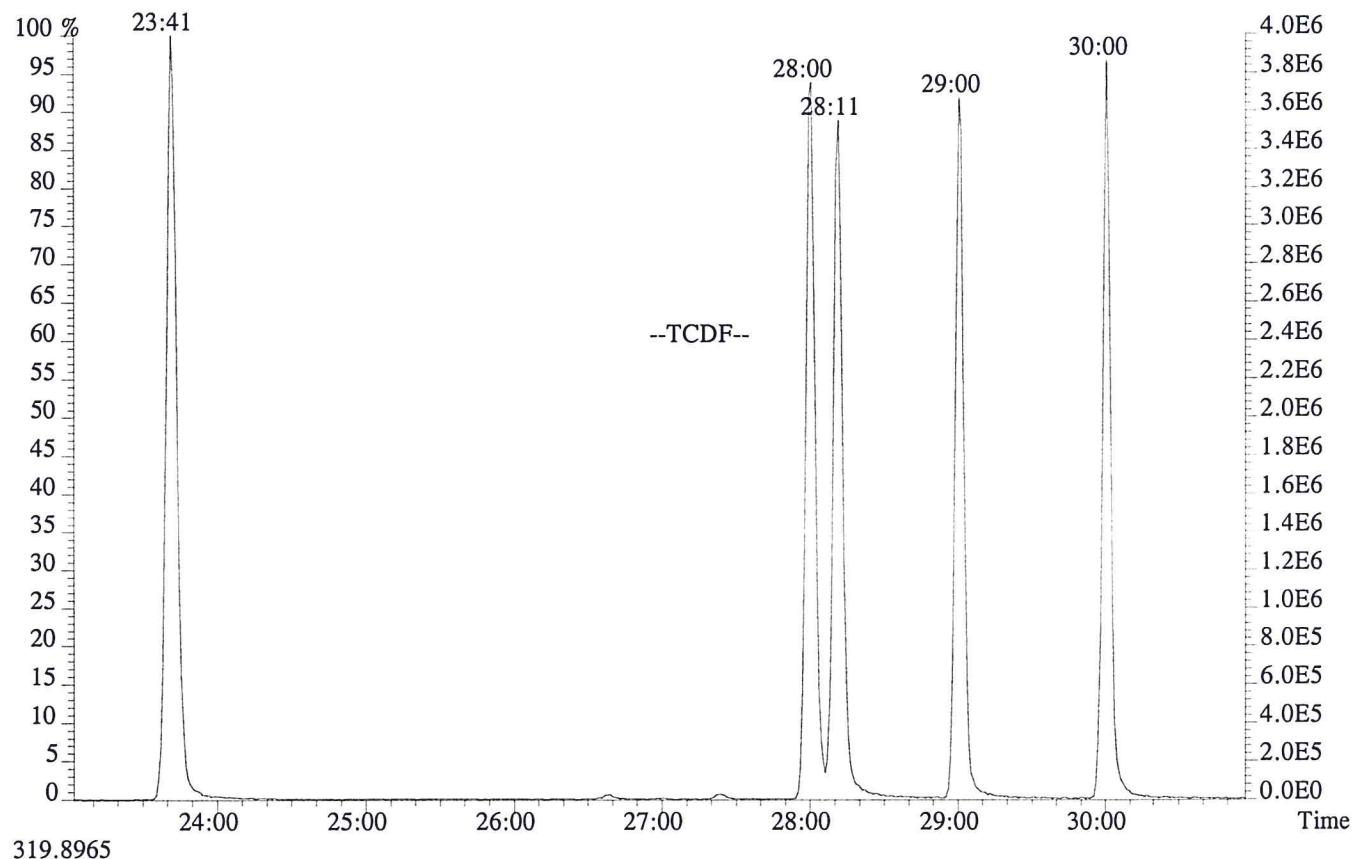
Congener	Retention Time	Retention Time
	First Eluting	Last Eluting
TCDF	23:41	30:00
TCDD	25:32	29:50
PeCDF	29:57	34:11
PeCDD	31:29	33:56
HxCDF	34:50	37:20
HxCDD	35:21	36:56
HpCDF	38:32	39:55
HpCDD	38:47	39:27

% Valley 2378-TCDD: 17 %

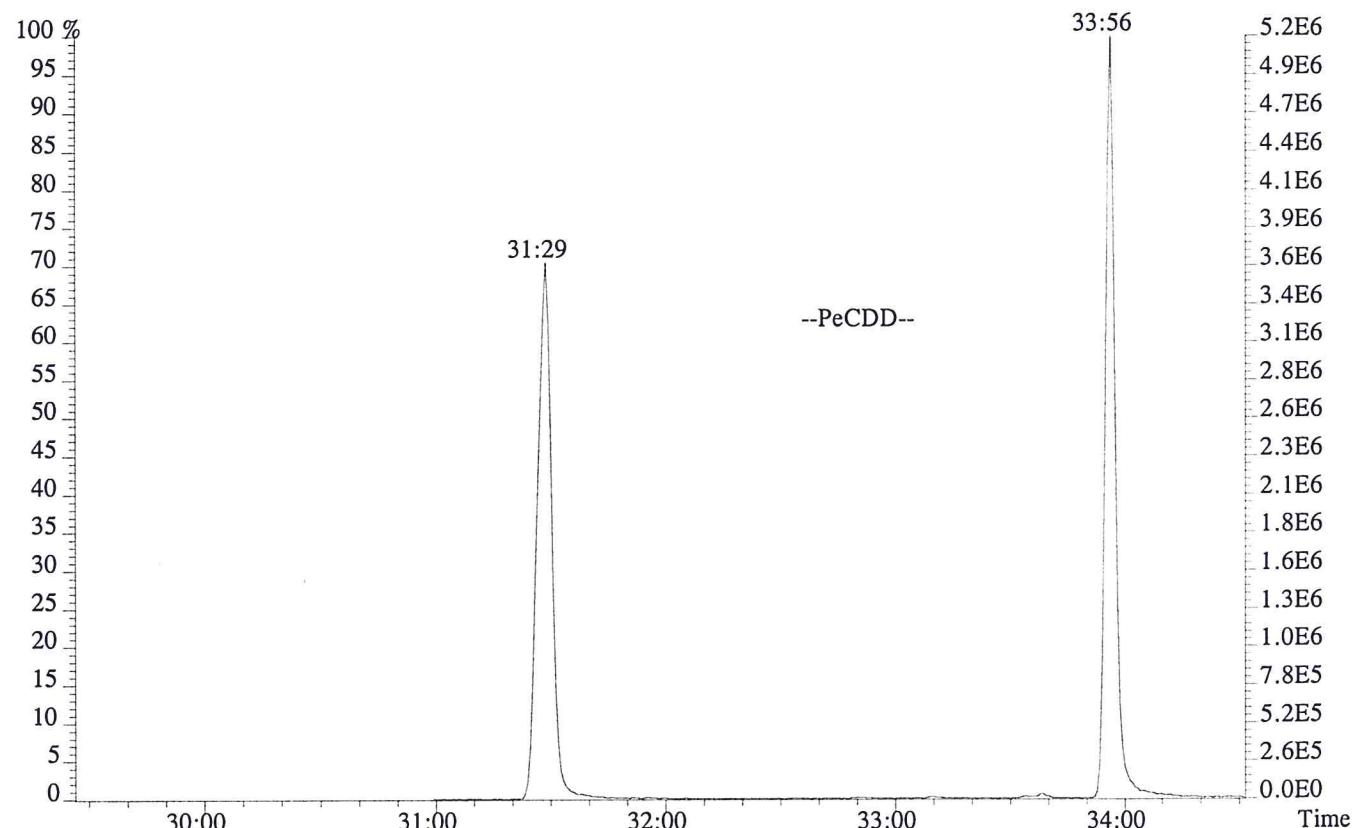
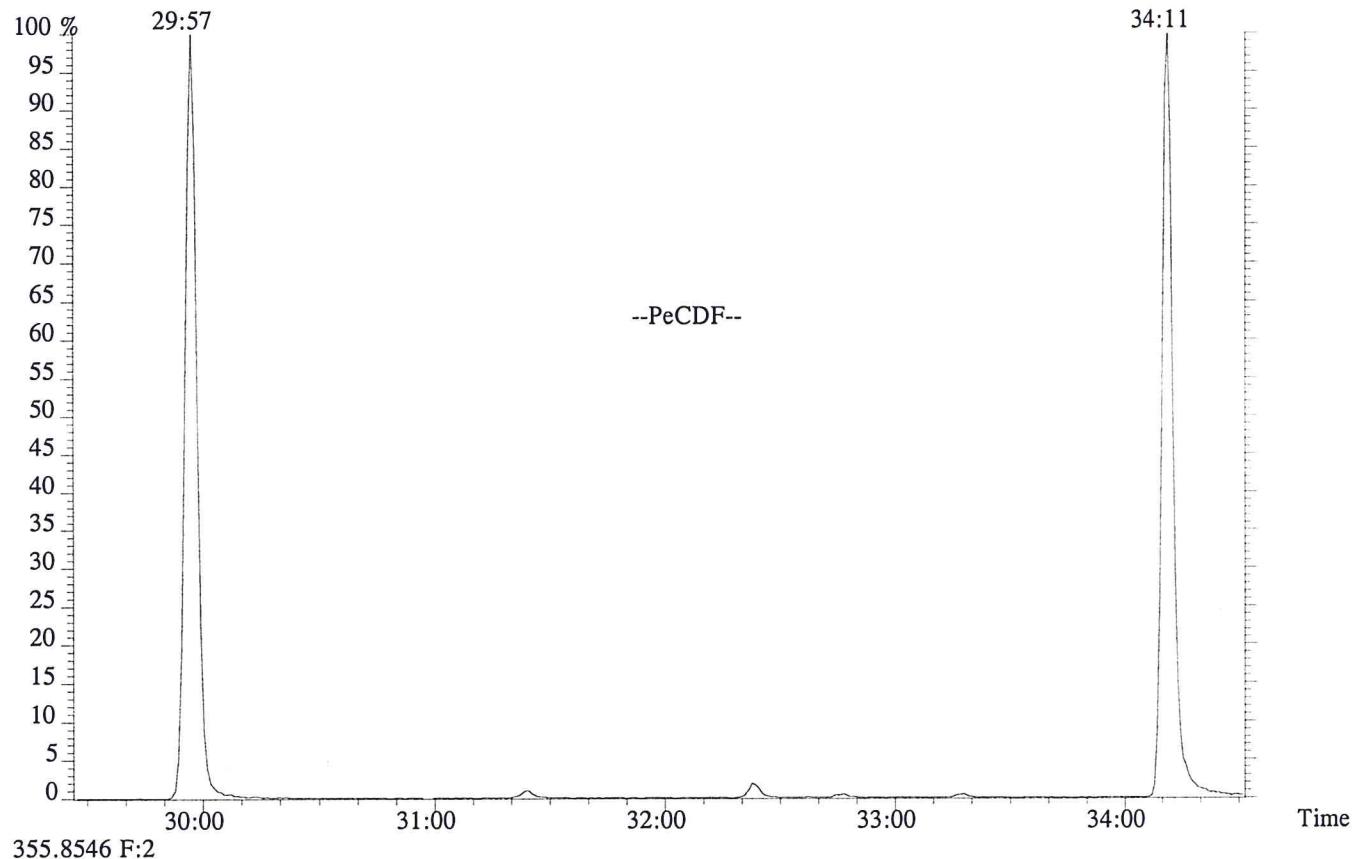
File:P600912 #1-562 Acq:12-OCT-2015 11:10:35 Probe EI+ Magnet SIR VG BioTech Mass spectf  
Sample#1 Exp:WD  
319.8965



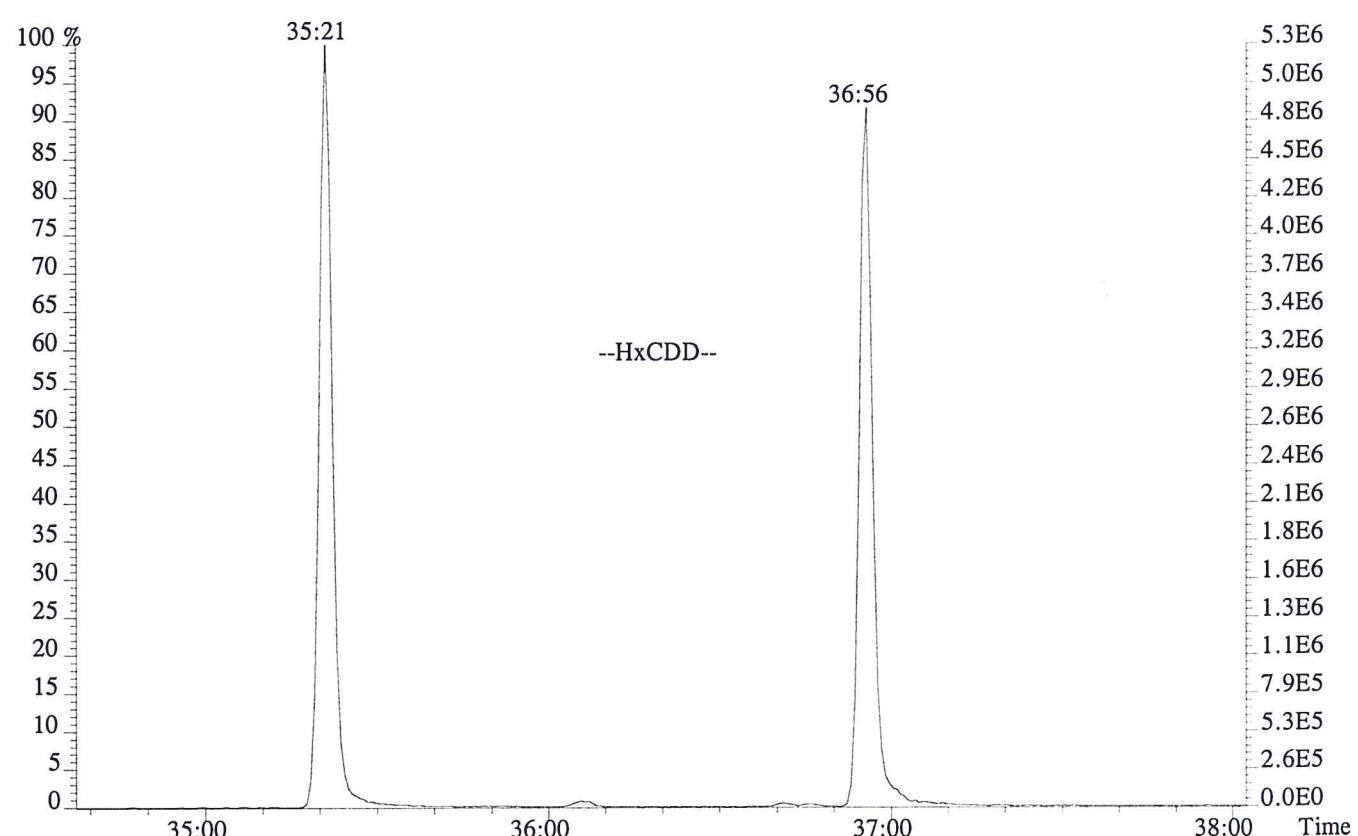
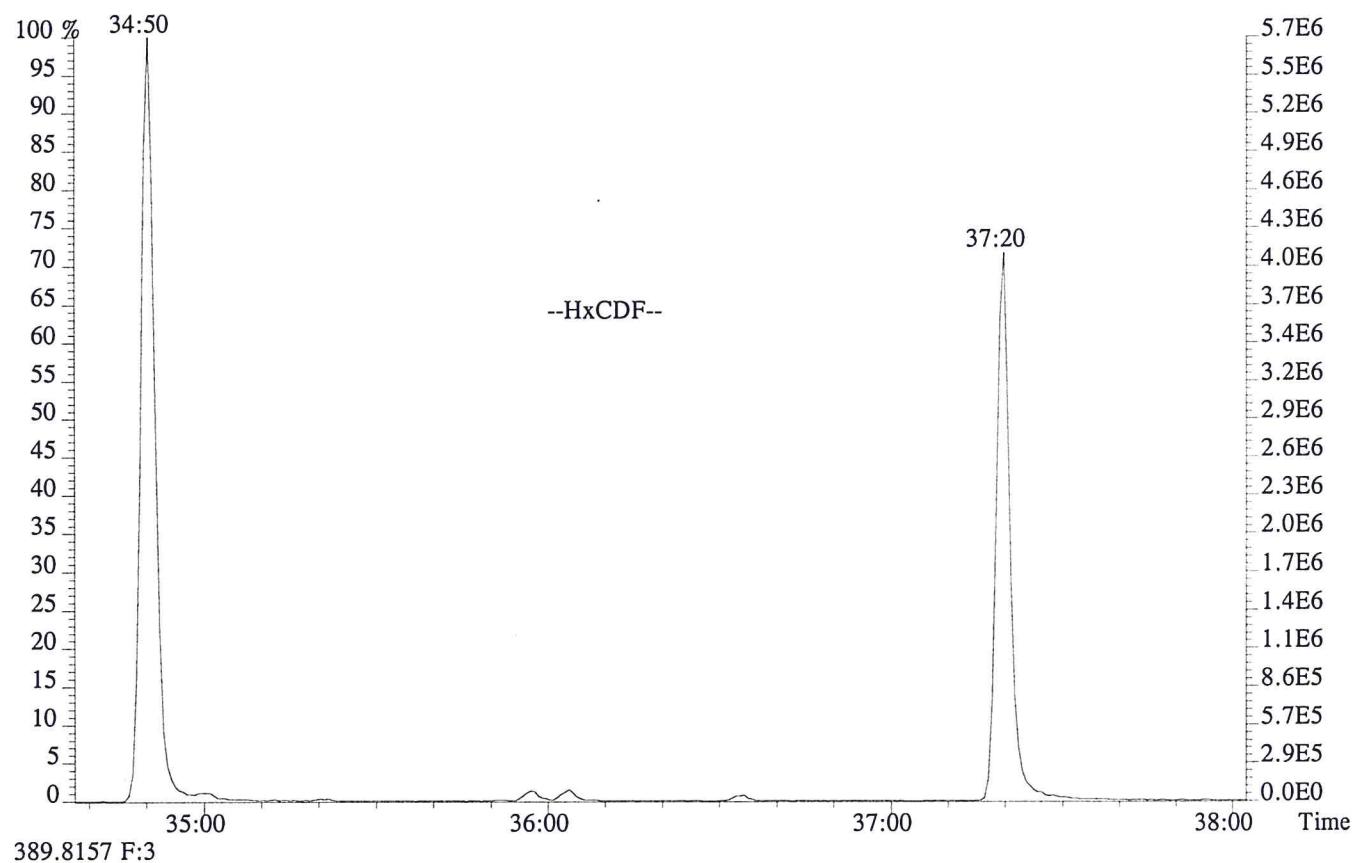
File:P600912 #1-562 Acq:12-OCT-2015 11:10:35 Probe EI+ Magnet SIR VG BioTech Mass spect<sup>f</sup>  
Sample#1 Exp:WD  
303.9016



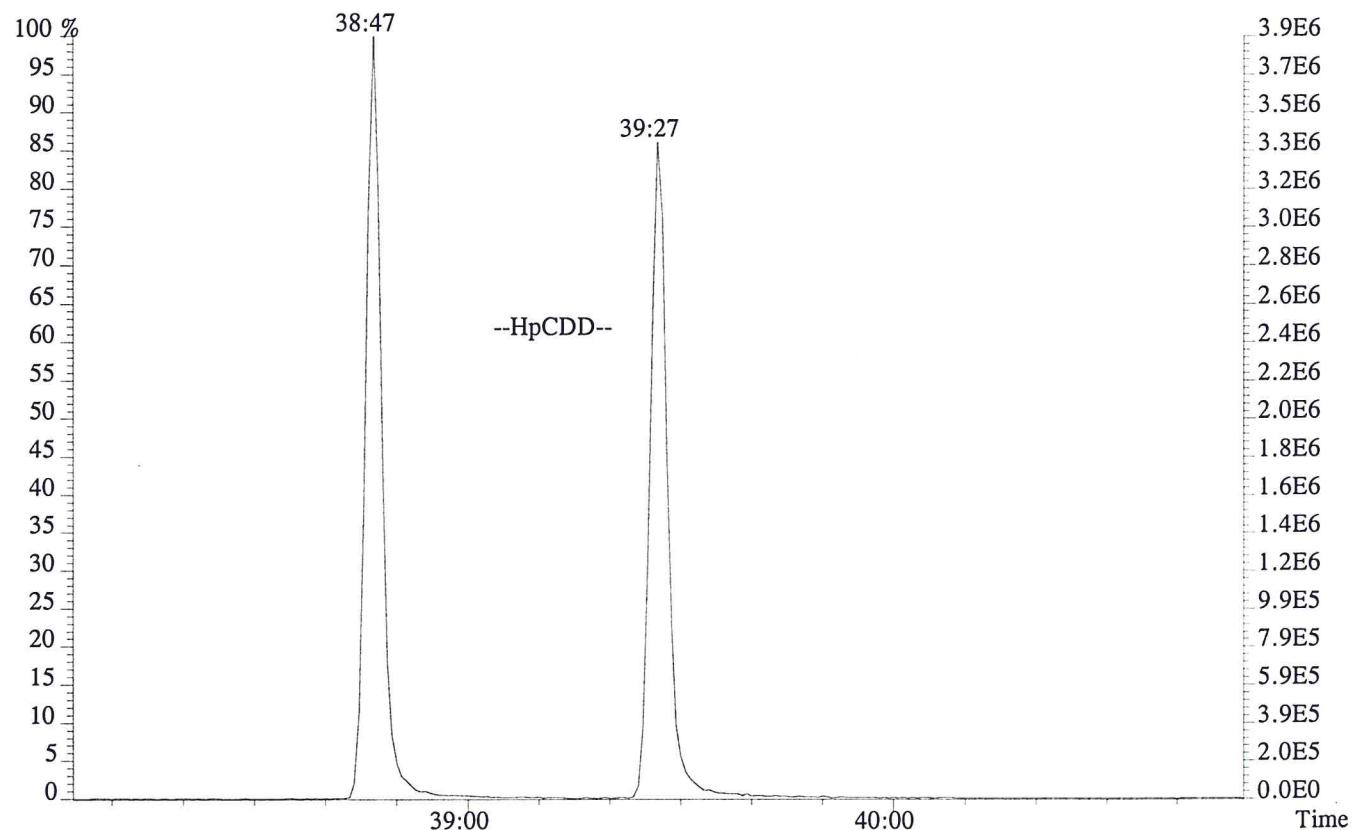
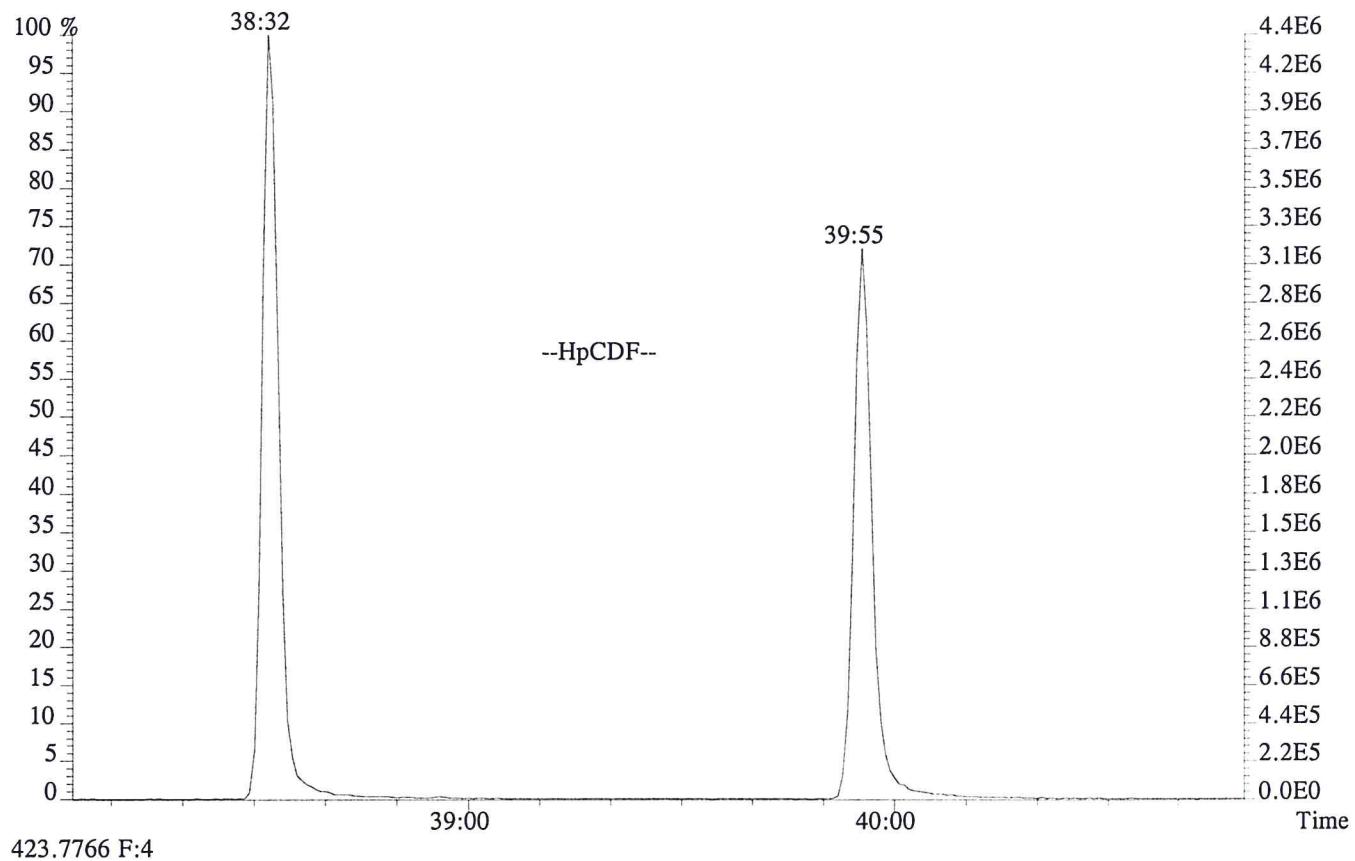
File:P600912 #1-562 Acq:12-OCT-2015 11:10:35 Probe EI+ Magnet SIR VG BioTech Mass spectf  
Sample#1 Exp:WD  
339.8597,339.8597 F:2



File:P600912 #1-308 Acq:12-OCT-2015 11:10:35 Probe EI+ Magnet SIR VG BioTech Mass spect&  
Sample#1 Exp:WD  
373.8208 F:3



File:P600912 #1-248 Acq:12-OCT-2015 11:10:35 Probe EI+ Magnet SIR VG BioTech Mass spect&  
Sample#1 Exp:WD  
407.7818 F:4



## USEPA - ITD

FORM 4A  
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: ALS ENVIRONMENTAL

Episode No.:

Contract No.:

SAS No.:

Initial Calibration Date: 08/19/15

Instrument ID: E-HRMS-08

GC Column ID: DB-5MSUI

VER Data Filename: P600911

Analysis Date: 12-OCT-15 Time: 09:51:43

	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	CONC. FOUND	CONC. RANGE (3) (ng/mL)	%RSD (4)
<b>NATIVE ANALYTES</b>						
2,3,7,8-TCDD	M/M+2	0.76	0.65-0.89	10.0	7.8 - 12.9	-0.1
1,2,3,7,8-PeCDD	M+2/M+4	1.54	1.32-1.78	49	39 - 65	-2.3
1,2,3,4,7,8-HxCDD	M+2/M+4	1.29	1.05-1.43	50	39 - 64	-0.5
1,2,3,6,7,8-HxCDD	M+2/M+4	1.20	1.05-1.43	47	39 - 64	-6.0
1,2,3,7,8,9-HxCDD	M+2/M+4	1.24	1.05-1.43	47	41 - 61	-6.1
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.03	0.88-1.20	47	43 - 58	-5.8
OCDD	M+2/M+4	0.88	0.76-1.02	96	79 - 126	-3.7
2,3,7,8-TCDF	M/M+2	0.78	0.65-0.89	9.1	8.4 - 12.0	-8.6
1,2,3,7,8-PeCDF	M+2/M+4	1.53	1.32-1.78	47	41 - 60	-6.0
2,3,4,7,8-PeCDF	M+2/M+4	1.51	1.32-1.78	47	41 - 61	-6.3
1,2,3,4,7,8-HxCDF	M+2/M+4	1.24	1.05-1.43	48	45 - 56	-4.8
1,2,3,6,7,8-HxCDF	M+2/M+4	1.19	1.05-1.43	46	44 - 57	-7.3
1,2,3,7,8,9-HxCDF	M+2/M+4	1.23	1.05-1.43	46	45 - 56	-7.6
2,3,4,6,7,8-HxCDF	M+2/M+4	1.20	1.05-1.43	46	44 - 57	-7.6
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.01	0.88-1.20	46	45 - 55	-7.4
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.02	0.88-1.20	46	43 - 58	-7.0
OCDF	M+2/M+4	0.89	0.76-1.02	90	63 - 159	-10.1

(1) See Table 8, Method 1613B, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613B.

(3) Contract-required concentration range as specified in Table 6, Method 1613B, under VER.

(4) The beginning CCAL %RSD for the 17 unlabeled standard must not exceed +/- 20%, Section 7.7.4.1. The ending CCAL must not exceed +/-25%, Section 8.3.2.4, Method 8290

12/2012  
1613F4A.FRM

## USEPA - ITD

FORM 4B  
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: ALS ENVIRONMENTAL

Episode No.:

Contract No.:

SAS No.:

Initial Calibration Date: 08/19/15

Instrument ID: E-HRMS-08

GC Column ID: DB-5MSUI

VER Data Filename: P600911

Analysis Date: 12-OCT-15 Time: 09:51:43

LABELED COMPOUNDS	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	CONC. FOUND	CONC. RANGE (3) (ng/mL)	%RSD (5)
13C-2,3,7,8-TCDD	M/M+2	0.79	0.65-0.89	86	82 - 121	-13.6
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.60	1.32-1.78	118	62 - 160	17.6
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.25	1.05-1.43	97	85 - 117	-2.8
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.26	1.05-1.43	107	85 - 118	7.4
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.06	0.88-1.20	111	72 - 138	10.9
13C-OCDD	M+2/M+4	0.90	0.76-1.02	273	96 - 415	36.4
13C-2,3,7,8-TCDF	M/M+2	0.78	0.65-0.89	103	71 - 140	3.0
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.57	1.32-1.78	113	76 - 130	12.6
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.56	1.32-1.78	115	77 - 130	15.3
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.52	0.43-0.59	88	76 - 131	-11.7
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.52	0.43-0.59	94	70 - 143	-5.5
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.51	0.43-0.59	94	74 - 135	-5.9
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.51	0.43-0.59	95	73 - 137	-4.7
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.44	0.37-0.51	102	78 - 129	2.5
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.44	0.37-0.51	90	77 - 129	-10.1

## CLEANUP STANDARD

37Cl-2,3,7,8-TCDD	8.5	7.8 - 12.7	-14.9
-------------------	-----	------------	-------

(1) See Table 8, Method 1613B, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613B.

(3) Contract-required concentration range, as specified in Table 6, Method 1613B, under VER.

(4) No ion abundance ratio; report concentration found.

(5) The beginning CCAL %RSD for the labeled standard must not exceed +/- 30% Section 7.7.4.2. The ending CCAL must not exceed +/- 35%, Sec 8.3.2.4 (8290)

12/2012  
1613F4B.FRM

ALS ENVIRONMENTAL  
Sample Response Summary

CLIENT ID.  
84080

Run #7      Filename P600911      Samp: 1      Inj: 1      Acquired: 12-OCT-15 09:51:43  
Processed: 21-OCT-15 18:05:05      Sample ID: CS3

Typ	Name	RT-1	Resp 1	Resp 2	Ratio	Meet	Mod?	RRF
1 Unk	2,3,7,8-TCDF	28:12	2.793e+03	3.585e+03	0.78	yes	no	0.941
2 Unk	1,2,3,7,8-PeCDF	32:23	2.398e+04	1.573e+04	1.53	yes	no	0.987
3 Unk	2,3,4,7,8-PeCDF	33:17	2.318e+04	1.539e+04	1.51	yes	no	0.934
4 Unk	1,2,3,4,7,8-HxCDF	35:57	2.232e+04	1.805e+04	1.24	yes	no	1.189
5 Unk	1,2,3,6,7,8-HxCDF	36:03	2.334e+04	1.958e+04	1.19	yes	no	1.126
6 Unk	2,3,4,6,7,8-HxCDF	36:33	2.283e+04	1.899e+04	1.20	yes	no	1.116
7 Unk	1,2,3,7,8,9-HxCDF	37:18	2.136e+04	1.736e+04	1.23	yes	no	1.158
8 Unk	1,2,3,4,6,7,8-HpCDF	38:32	2.160e+04	2.149e+04	1.01	yes	no	1.373
9 Unk	1,2,3,4,7,8,9-HpCDF	39:55	1.862e+04	1.833e+04	1.02	yes	no	1.287
10 Unk	OCDF	42:24	3.505e+04	3.927e+04	0.89	yes	no	1.257
11 Unk	2,3,7,8-TCDD	28:59	2.346e+03	3.087e+03	0.76	yes	no	1.010
12 Unk	1,2,3,7,8-PeCDD	33:34	1.851e+04	1.205e+04	1.54	yes	no	0.932
13 Unk	1,2,3,4,7,8-HxCDD	36:41	1.904e+04	1.474e+04	1.29	yes	no	1.026
14 Unk	1,2,3,6,7,8-HxCDD	36:46	1.814e+04	1.516e+04	1.20	yes	no	1.021
15 Unk	1,2,3,7,8,9-HxCDD	37:00	1.999e+04	1.607e+04	1.24	yes	no	1.133
16 Unk	1,2,3,4,6,7,8-HpCDD	39:27	1.835e+04	1.785e+04	1.03	yes	no	1.034
17 Unk	OCDD	42:12	3.291e+04	3.744e+04	0.88	yes	no	1.111
18 IS	13C-2,3,7,8-TCDF	28:11	3.255e+04	4.164e+04	0.78	yes	no	1.379
19 IS	13C-1,2,3,7,8-PeCDF	32:22	5.227e+04	3.328e+04	1.57	yes	no	1.456
20 IS	13C-2,3,4,7,8-PeCDF	33:16	5.368e+04	3.449e+04	1.56	yes	no	1.465
21 IS	13C-1,2,3,4,7,8-HxCDF	35:56	2.429e+04	4.700e+04	0.52	yes	no	1.075
22 IS	13C-1,2,3,6,7,8-HxCDF	36:02	2.802e+04	5.420e+04	0.52	yes	no	1.158
23 IS	13C-2,3,4,6,7,8-HxCDF	36:32	2.752e+04	5.364e+04	0.51	yes	no	1.133
24 IS	13C-1,2,3,7,8,9-HxCDF	37:18	2.458e+04	4.782e+04	0.51	yes	no	1.024
25 IS	13C-1,2,3,4,6,7,8-HpCDF	38:32	2.059e+04	4.717e+04	0.44	yes	no	0.880
26 IS	13C-1,2,3,4,7,8,9-HpCDF	39:55	1.881e+04	4.298e+04	0.44	yes	no	0.914
27 IS	13C-2,3,7,8-TCDD	28:58	2.377e+04	3.002e+04	0.79	yes	no	1.193
28 IS	13C-1,2,3,7,8-PeCDD	33:33	4.127e+04	2.585e+04	1.60	yes	no	1.094
29 IS	13C-1,2,3,4,7,8-HxCDD	36:40	3.683e+04	2.939e+04	1.25	yes	no	0.906
30 IS	13C-1,2,3,6,7,8-HxCDD	36:45	3.867e+04	3.071e+04	1.26	yes	no	0.860
31 IS	13C-1,2,3,4,6,7,8-HpCDD	39:26	3.828e+04	3.608e+04	1.06	yes	no	0.892
32 IS	13C-OCDD	42:11	6.216e+04	6.939e+04	0.90	yes	no	0.642
33 RS/RT	13C-1,2,3,4-TCDD	28:24	2.322e+04	2.898e+04	0.80	yes	no	-
34 RS/RT	13C-1,2,3,7,8,9-HxCDD	36:60	4.196e+04	3.321e+04	1.26	yes	no	-
35 C/Up	37Cl-2,3,7,8-TCDD	28:59	5.610e+03				no	1.263

---

ALS ENVIRONMENTAL  
10450 Stancliff Rd, Suite 115  
Houston, TX 77099  
Office (713) 266-1599. Fax (713) 266-0130

ALS ENVIRONMENTAL  
Signal/Noise Height Ratio Summary

CLIENT ID.  
84080

Run #7   Filename P600911              Samp: 1    Inj: 1              Acquired: 12-OCT-15 09:51:43  
Processed: 21-OCT-15 18:05:05              LAB. ID: CS3

	Name	Signal 1	Noise 1	S/N Rat.1	Signal 2	Noise 2	S/N Rat.2
--	------	----------	---------	-----------	----------	---------	-----------

1	2,3,7,8-TCDF	5.09e+05	7.28e+02	7.0e+02	6.54e+05	1.40e+03	4.7e+02
2	1,2,3,7,8-PeCDF	4.54e+06	7.40e+02	6.1e+03	2.97e+06	2.35e+03	1.3e+03
3	2,3,4,7,8-PeCDF	4.64e+06	7.40e+02	6.3e+03	3.08e+06	2.35e+03	1.3e+03
4	1,2,3,4,7,8-HxCDF	4.87e+06	9.48e+02	5.1e+03	3.96e+06	6.40e+02	6.2e+03
5	1,2,3,6,7,8-HxCDF	5.03e+06	9.48e+02	5.3e+03	4.17e+06	6.40e+02	6.5e+03
6	2,3,4,6,7,8-HxCDF	5.05e+06	9.48e+02	5.3e+03	4.23e+06	6.40e+02	6.6e+03
7	1,2,3,7,8,9-HxCDF	4.51e+06	9.48e+02	4.8e+03	3.67e+06	6.40e+02	5.7e+03
8	1,2,3,4,6,7,8-HpCDF	4.78e+06	1.98e+03	2.4e+03	4.79e+06	1.93e+03	2.5e+03
9	1,2,3,4,7,8,9-HpCDF	3.85e+06	1.98e+03	1.9e+03	3.81e+06	1.93e+03	2.0e+03
10	OCDF	6.50e+06	7.92e+02	8.2e+03	7.05e+06	1.17e+03	6.0e+03
11	2,3,7,8-TCDD	4.53e+05	7.56e+02	6.0e+02	5.86e+05	1.14e+03	5.1e+02
12	1,2,3,7,8-PeCDD	3.76e+06	1.43e+03	2.6e+03	2.40e+06	9.16e+02	2.6e+03
13	1,2,3,4,7,8-HxCDD	4.26e+06	6.88e+02	6.2e+03	3.43e+06	1.09e+03	3.1e+03
14	1,2,3,6,7,8-HxCDD	4.07e+06	6.88e+02	5.9e+03	3.26e+06	1.09e+03	3.0e+03
15	1,2,3,7,8,9-HxCDD	4.45e+06	6.88e+02	6.5e+03	3.53e+06	1.09e+03	3.2e+03
16	1,2,3,4,6,7,8-HpCDD	3.94e+06	7.60e+02	5.2e+03	3.86e+06	7.44e+02	5.2e+03
17	OCDD	6.20e+06	5.12e+02	1.2e+04	7.01e+06	8.84e+02	7.9e+03
18	13C-2,3,7,8-TCDF	5.93e+06	2.00e+03	3.0e+03	7.60e+06	1.42e+03	5.3e+03
19	13C-1,2,3,7,8-PeCDF	1.00e+07	1.08e+03	9.2e+03	6.35e+06	1.32e+03	4.8e+03
20	13C-2,3,4,7,8-PeCDF	1.07e+07	1.08e+03	9.8e+03	6.93e+06	1.32e+03	5.2e+03
21	13C-1,2,3,4,7,8-HxCDF	5.36e+06	1.04e+03	5.2e+03	1.03e+07	1.55e+03	6.6e+03
22	13C-1,2,3,6,7,8-HxCDF	6.01e+06	1.04e+03	5.8e+03	1.17e+07	1.55e+03	7.5e+03
23	13C-2,3,4,6,7,8-HxCDF	6.09e+06	1.04e+03	5.9e+03	1.19e+07	1.55e+03	7.7e+03
24	13C-1,2,3,7,8,9-HxCDF	5.19e+06	1.04e+03	5.0e+03	1.01e+07	1.55e+03	6.5e+03
25	13C-1,2,3,4,6,7,8-HpCDF	4.67e+06	1.00e+03	4.7e+03	1.05e+07	3.99e+03	2.6e+03
26	13C-1,2,3,4,7,8,9-HpCDF	3.91e+06	1.00e+03	3.9e+03	8.94e+06	3.99e+03	2.2e+03
27	13C-2,3,7,8-TCDD	4.60e+06	4.77e+03	9.6e+02	5.81e+06	2.08e+03	2.8e+03
28	13C-1,2,3,7,8-PeCDD	8.25e+06	1.26e+03	6.5e+03	5.15e+06	7.80e+02	6.6e+03
29	13C-1,2,3,4,7,8-HxCDD	8.72e+06	2.59e+03	3.4e+03	6.85e+06	1.62e+03	4.2e+03
30	13C-1,2,3,6,7,8-HxCDD	8.30e+06	2.59e+03	3.2e+03	6.63e+06	1.62e+03	4.1e+03
31	13C-1,2,3,4,6,7,8-HpCDD	8.25e+06	1.24e+03	6.7e+03	7.79e+06	6.56e+02	1.2e+04
32	13C-OCDD	1.17e+07	9.36e+02	1.3e+04	1.31e+07	1.06e+03	1.2e+04
33	13C-1,2,3,4-TCDD	4.48e+06	4.77e+03	9.4e+02	5.55e+06	2.08e+03	2.7e+03
34	13C-1,2,3,7,8,9-HxCDD	9.29e+06	2.59e+03	3.6e+03	7.39e+06	1.62e+03	4.6e+03
35	37Cl-2,3,7,8-TCDD	1.09e+06	1.36e+03	8.0e+02			

---Sample Calculation---

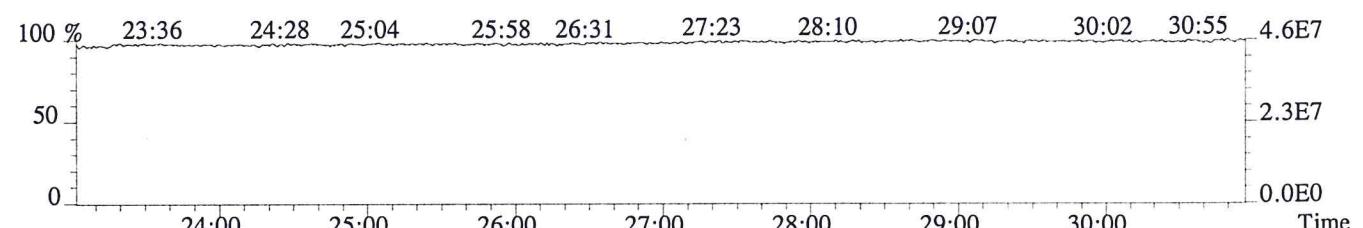
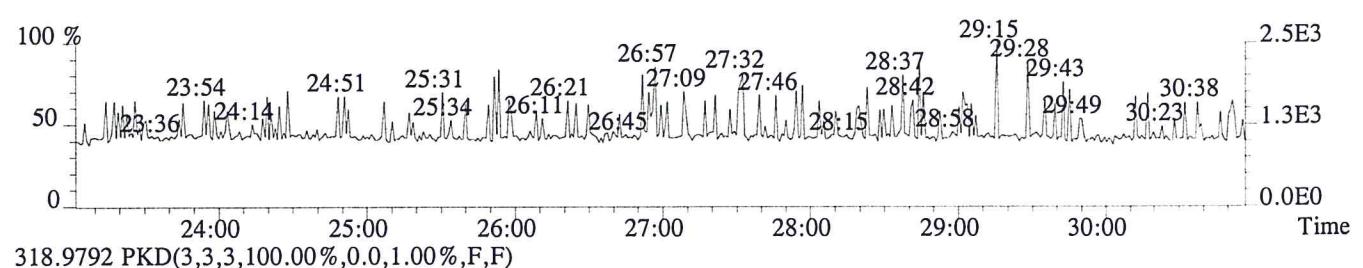
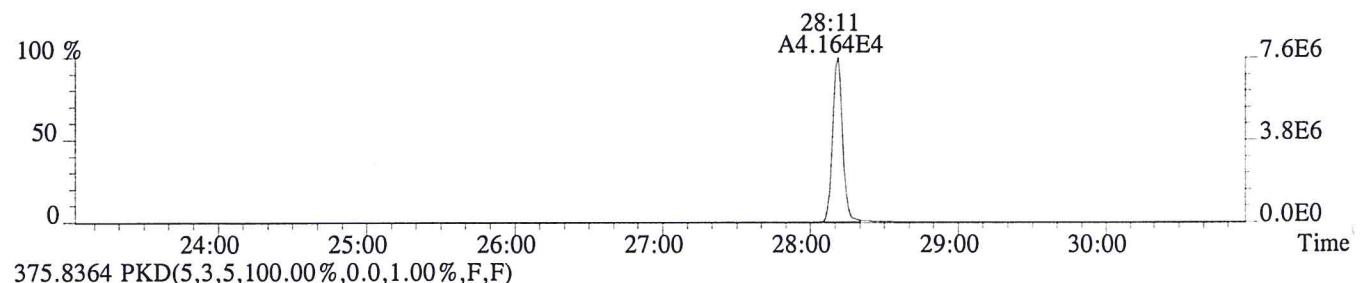
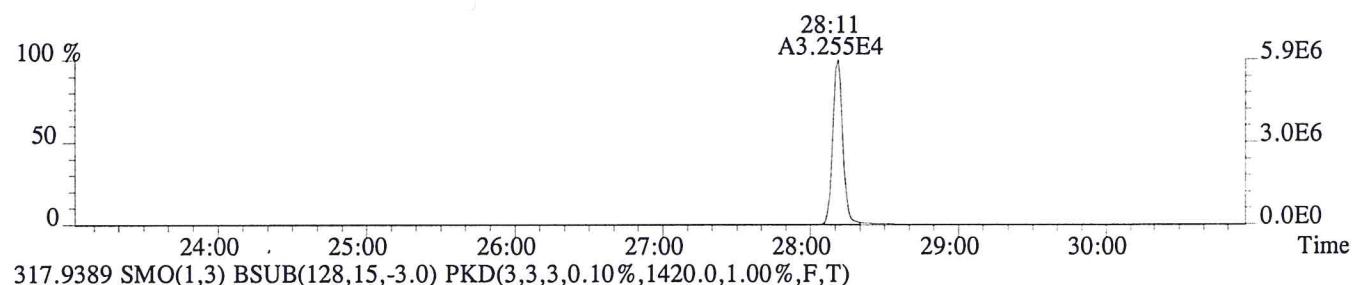
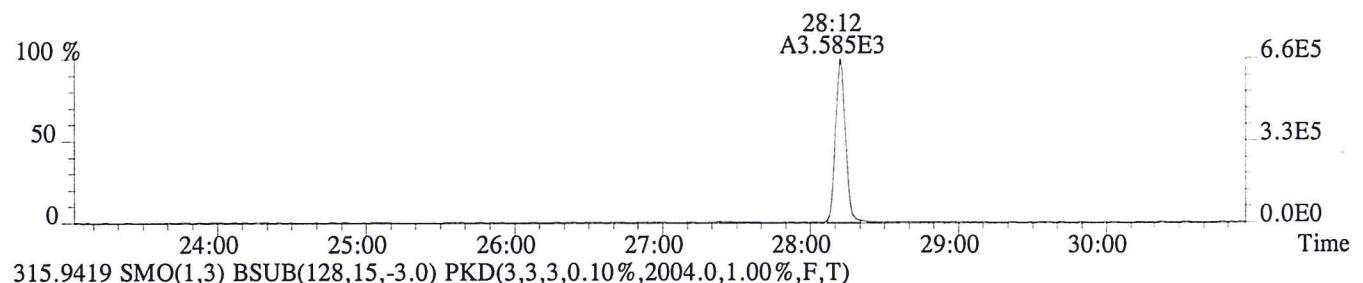
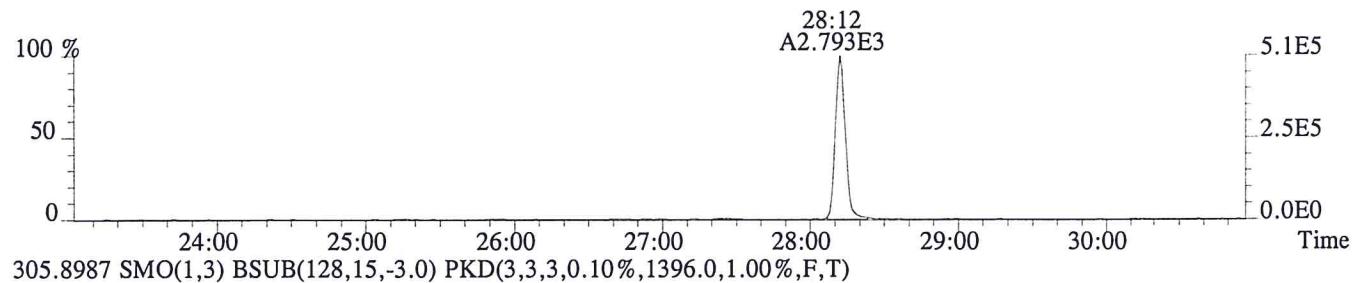
$$2.5 \times (7.560e+02 + 1.140e+03) \times 100$$

D/L TCDD =  $\frac{2.5 \times (7.560e+02 + 1.140e+03) \times 100}{(4.599e+06 + 5.808e+06)} = 1.010$

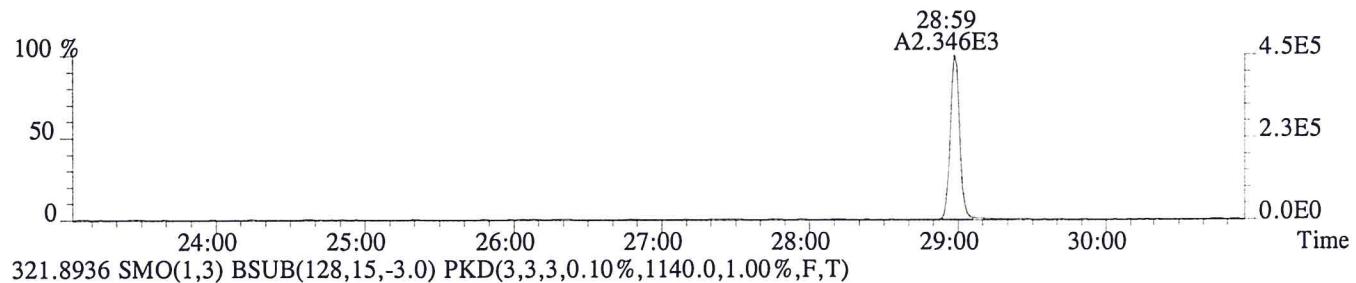
---

ALS ENVIRONMENTAL  
10450 Stancliff Rd., Suite 115  
Houston, TX 77099  
Office: (281) 530-5656. Fax: (281) 530-5887

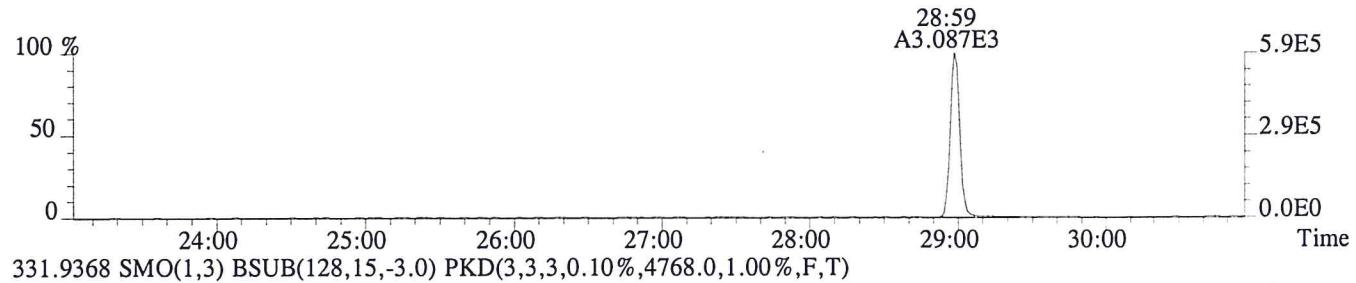
File:P600911 #1-562 Acq:12-OCT-2015 09:51:43 Probe EI + Magnet SIR VG BioTech Mass spectr  
 Sample#1 Exp:CS3  
 303.9016 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,728.0,1.00%,F,T)



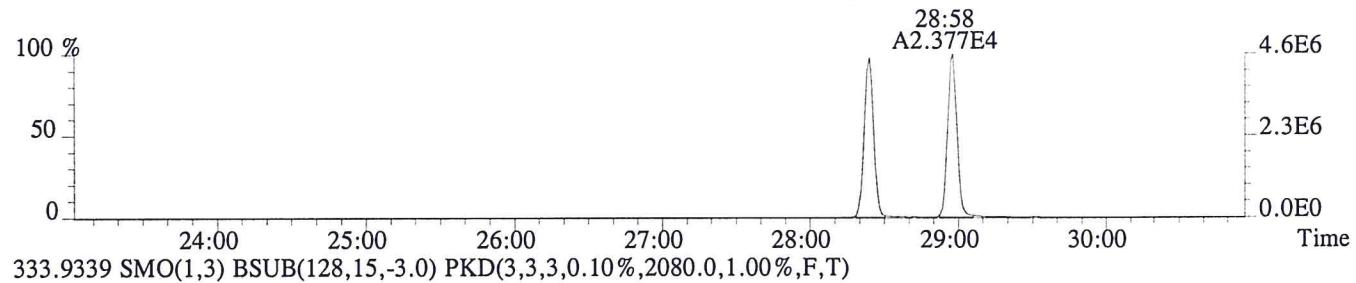
File:P600911 #1-562 Acq:12-OCT-2015 09:51:43 Probe EI+ Magnet SIR VG BioTech Mass spectf  
Sample#1 Exp:CS3  
319.8965 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,756.0,1.00%,F,T)



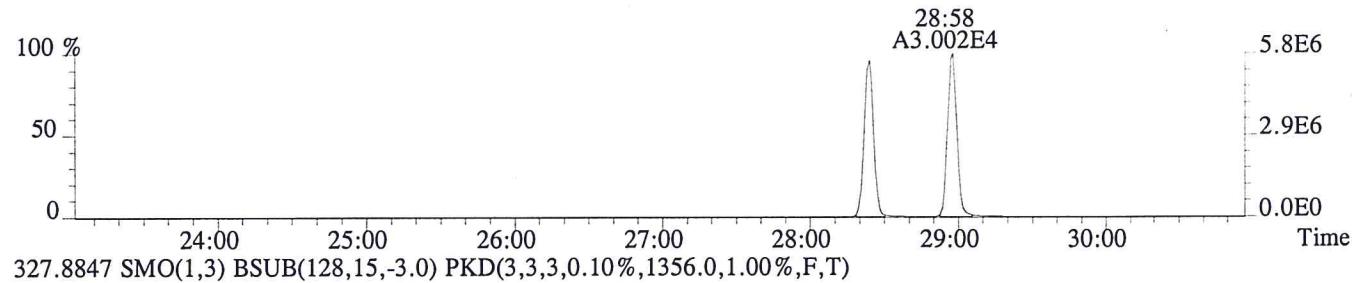
321.8936 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1140.0,1.00%,F,T)



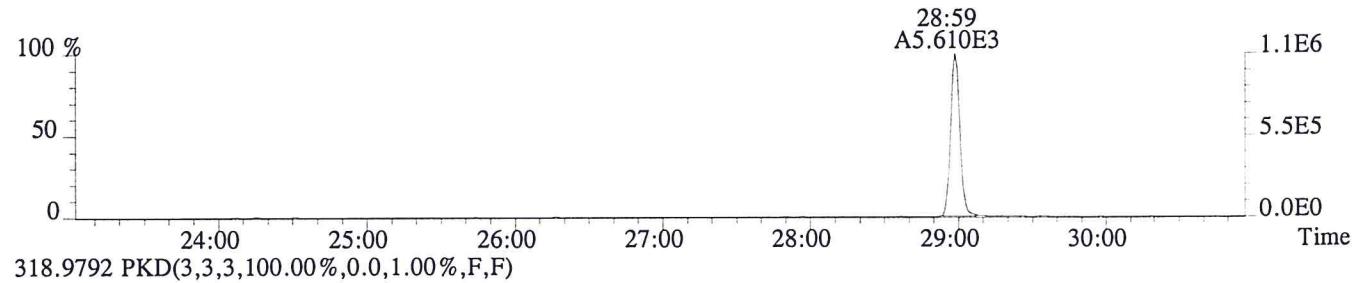
331.9368 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,4768.0,1.00%,F,T)



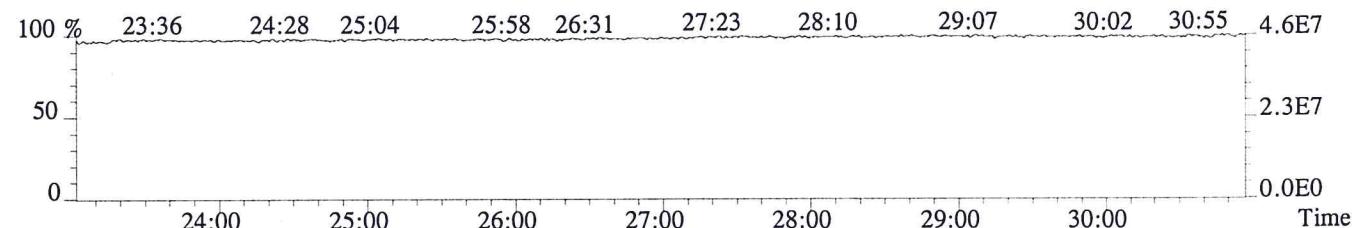
333.9339 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,2080.0,1.00%,F,T)



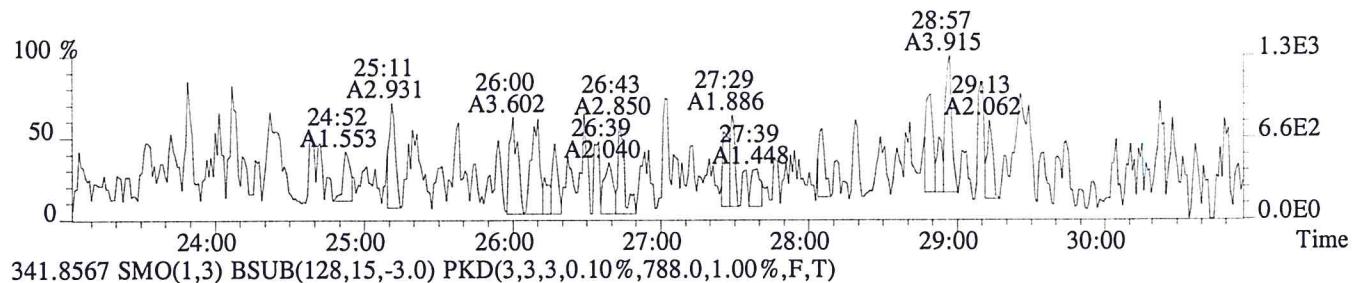
327.8847 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1356.0,1.00%,F,T)



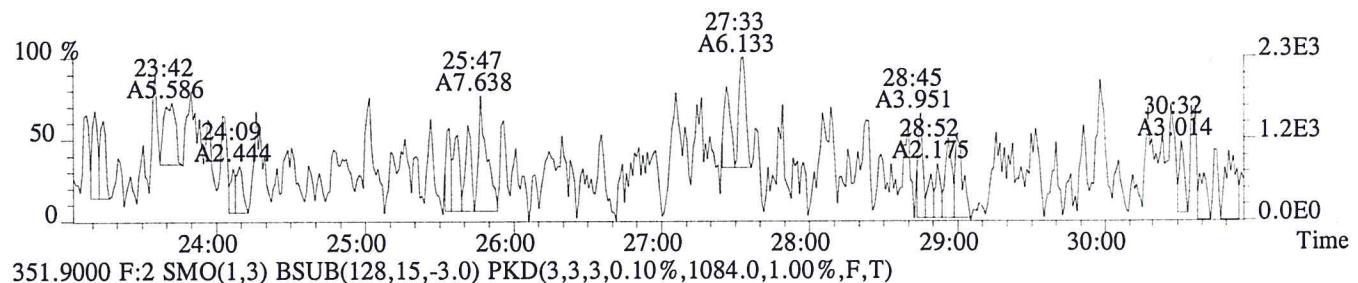
318.9792 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



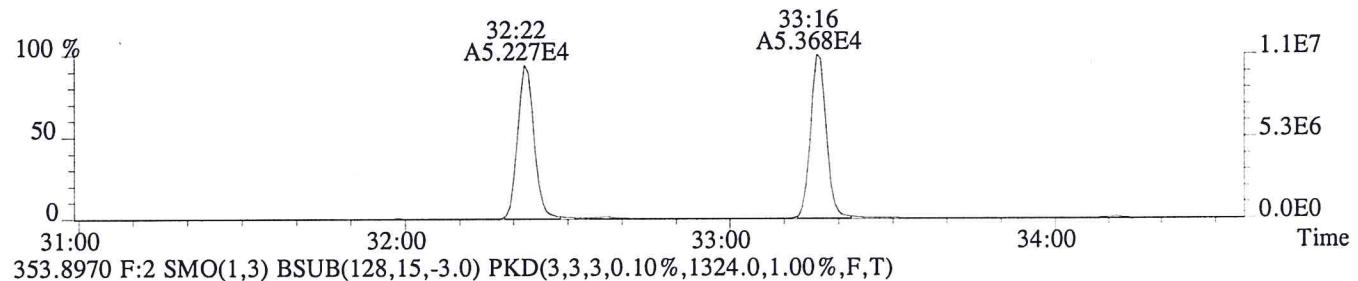
File:P600911 #1-562 Acq:12-OCT-2015 09:51:43 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:CS3  
 339.8597 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,380.0,1.00%,F,T)



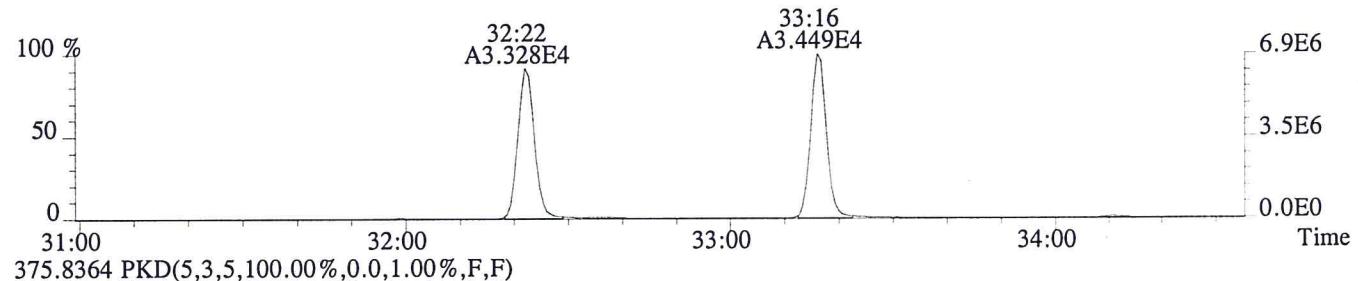
341.8567 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,788.0,1.00%,F,T)



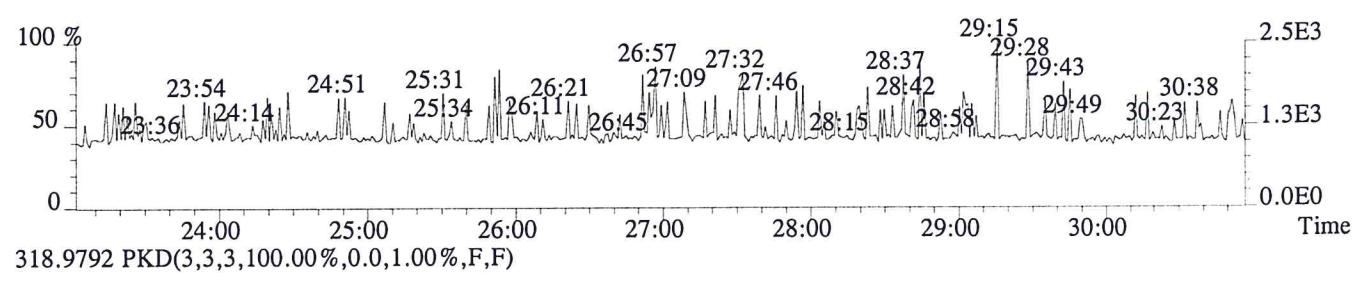
351.9000 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1084.0,1.00%,F,T)



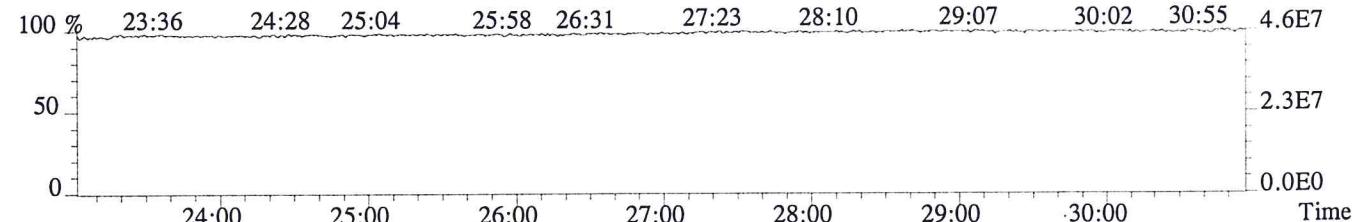
353.8970 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1324.0,1.00%,F,T)



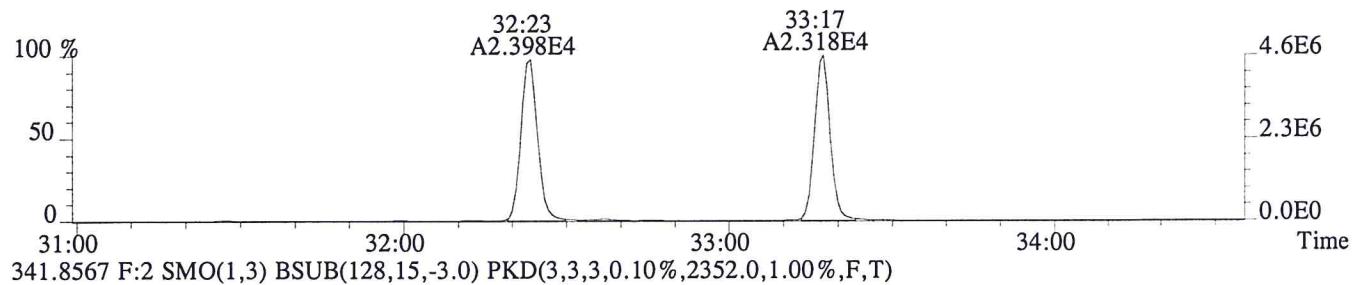
375.8364 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



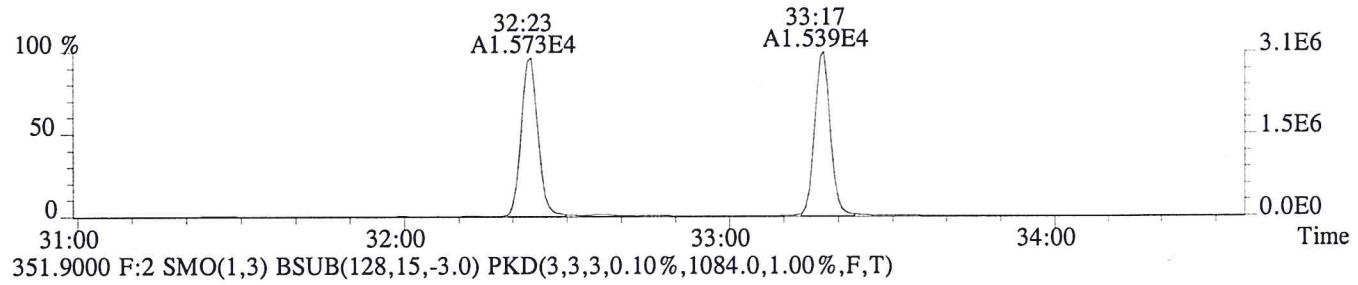
318.9792 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



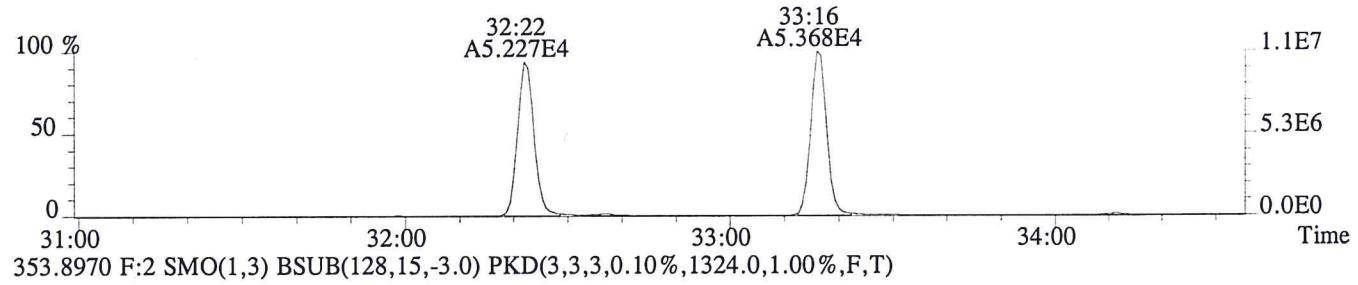
File:P600911 #1-325 Acq:12-OCT-2015 09:51:43 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:CS3  
 339.8597 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,740.0,1.00%,F,T)



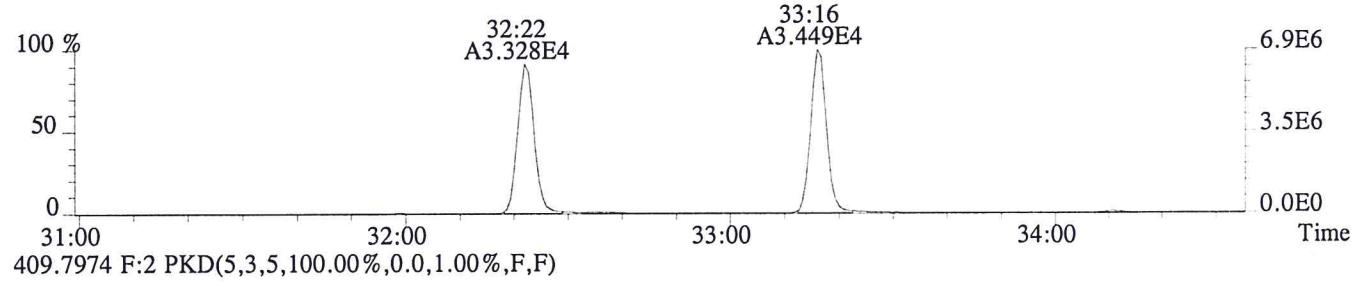
341.8567 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,2352.0,1.00%,F,T)



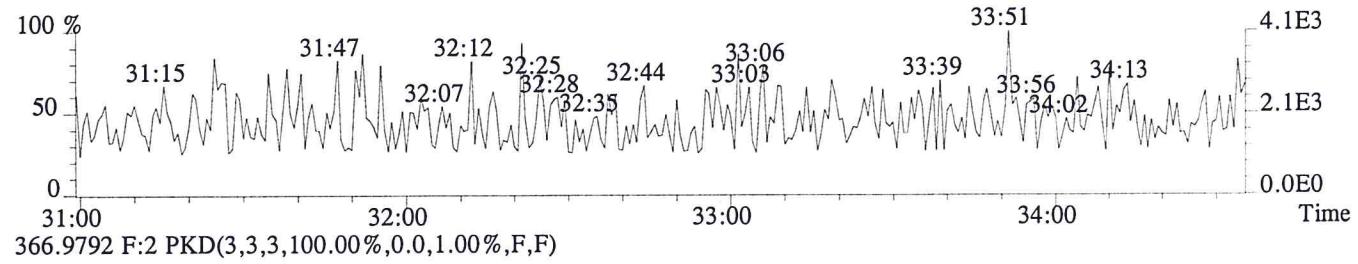
351.9000 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1084.0,1.00%,F,T)



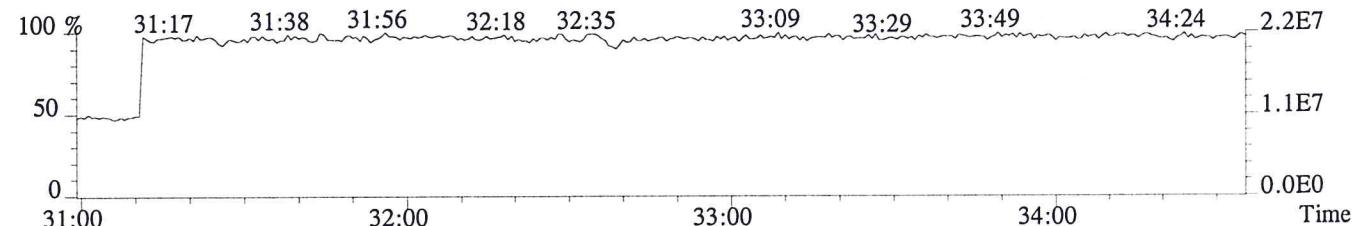
353.8970 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1324.0,1.00%,F,T)



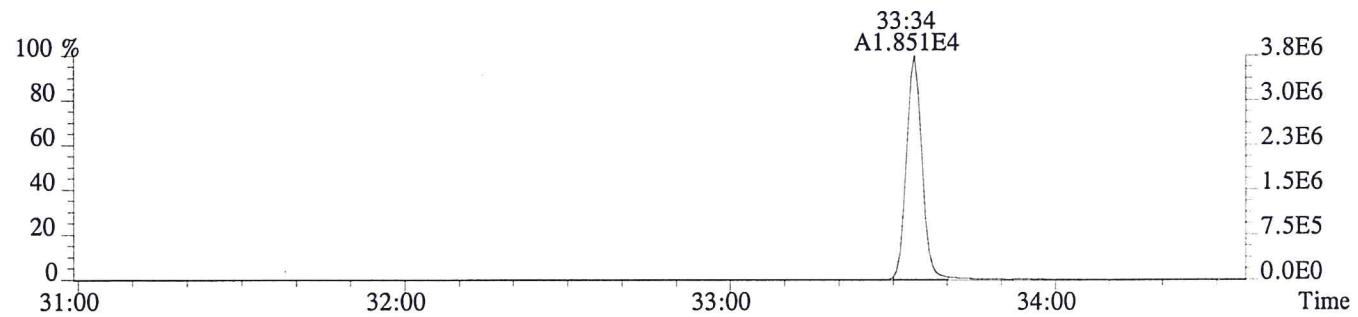
409.7974 F:2 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



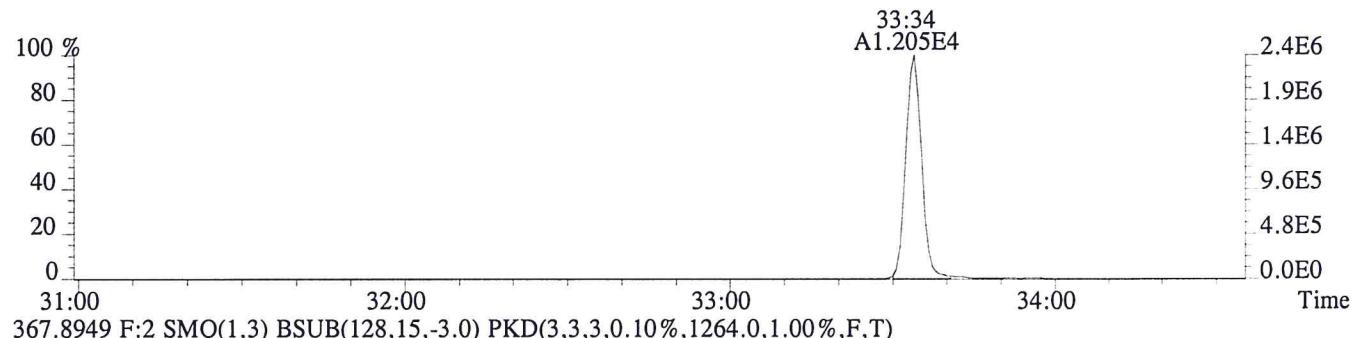
366.9792 F:2 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



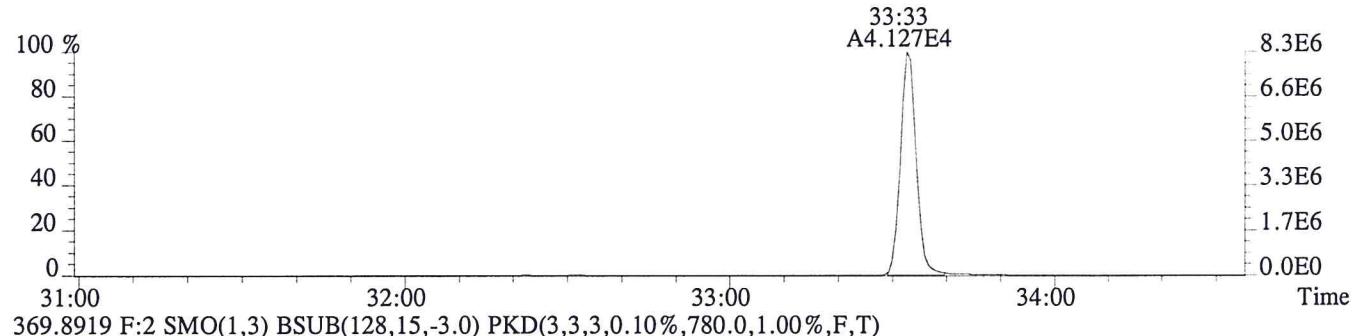
File:P600911 #1-325 Acq:12-OCT-2015 09:51:43 Probe EI+ Magnet SIR VG BioTech Mass spectf  
Sample#1 Exp:CS3  
355.8546 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1432.0,1.00%,F,T)



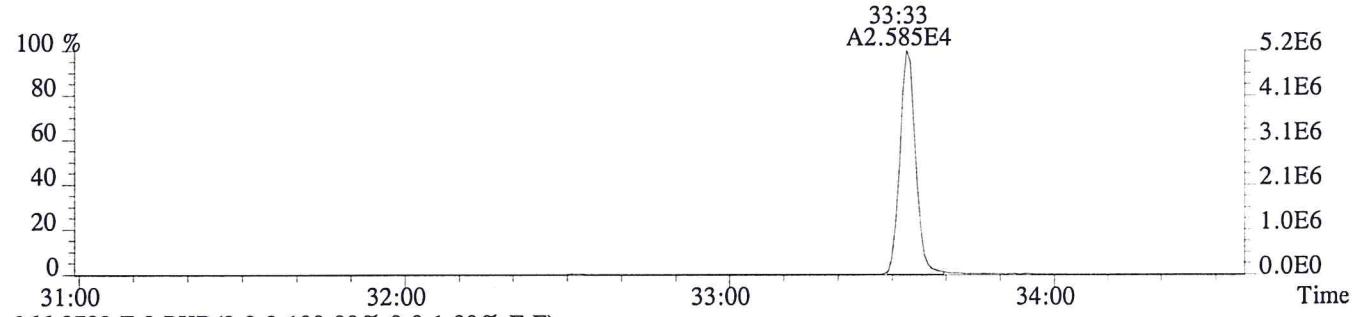
357.8516 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,916.0,1.00%,F,T)



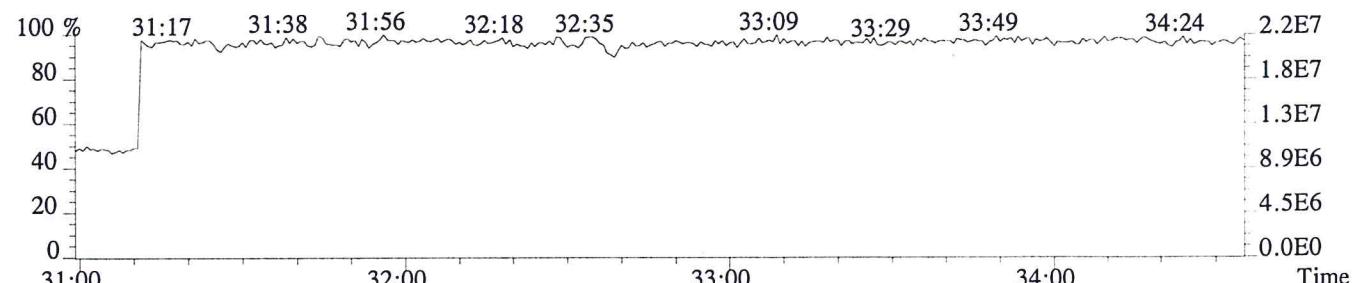
367.8949 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1264.0,1.00%,F,T)



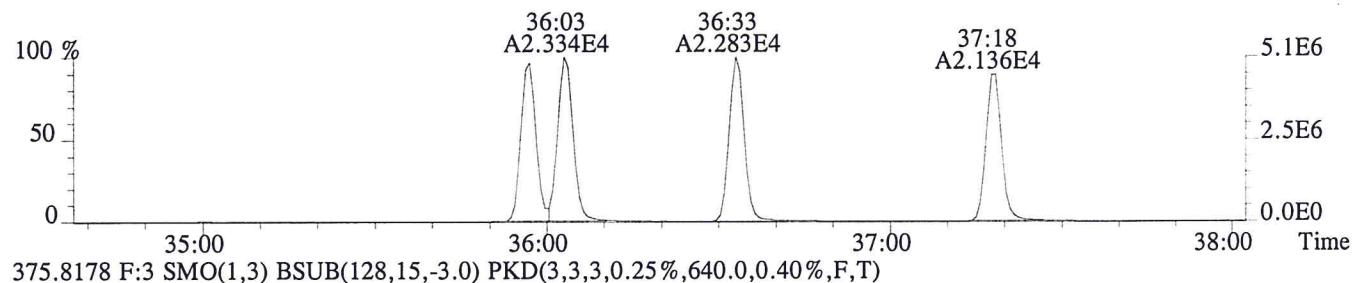
369.8919 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,780.0,1.00%,F,T)



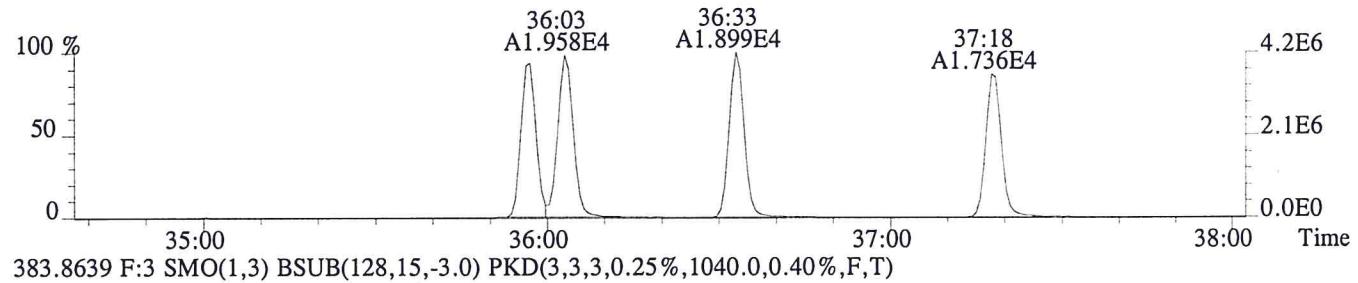
366.9792 F:2 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



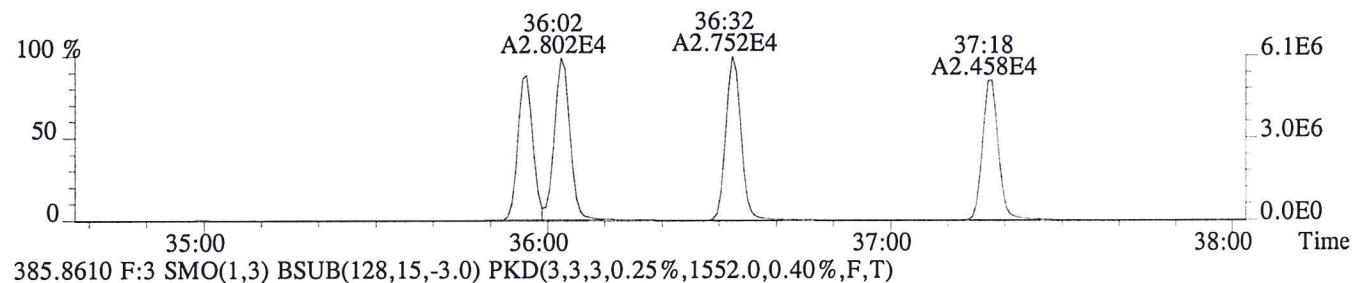
File:P600911 #1-308 Acq:12-OCT-2015 09:51:43 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:CS3  
 373.8208 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,948.0,0.40%,F,T)



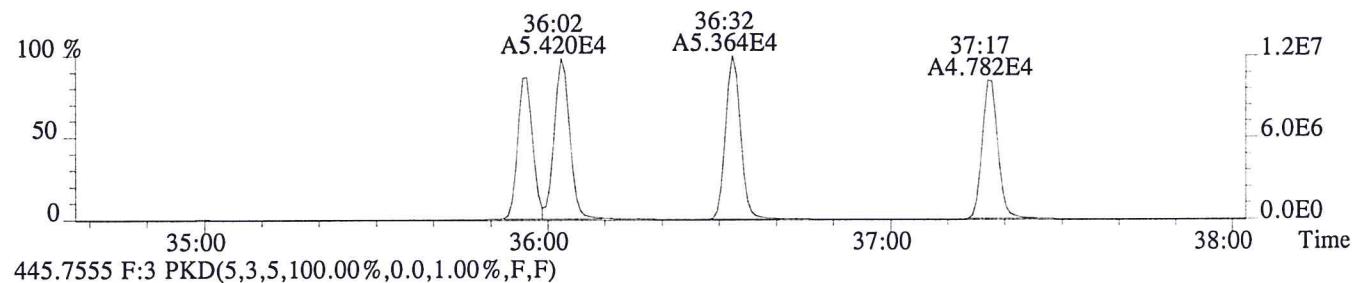
375.8178 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,640.0,0.40%,F,T)



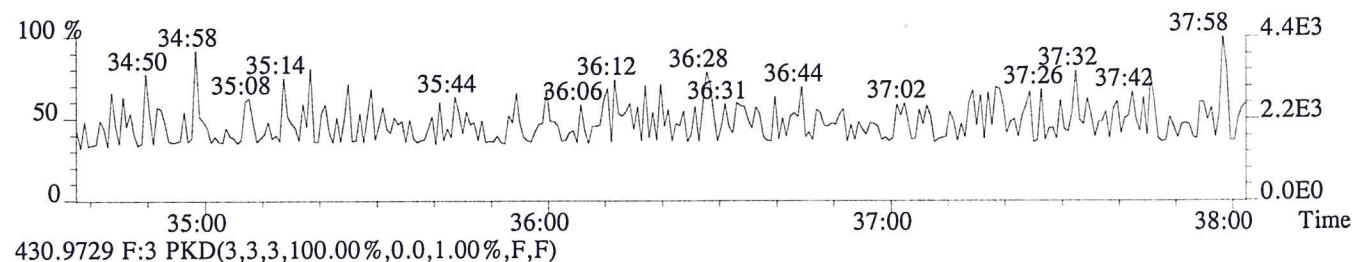
383.8639 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1040.0,0.40%,F,T)



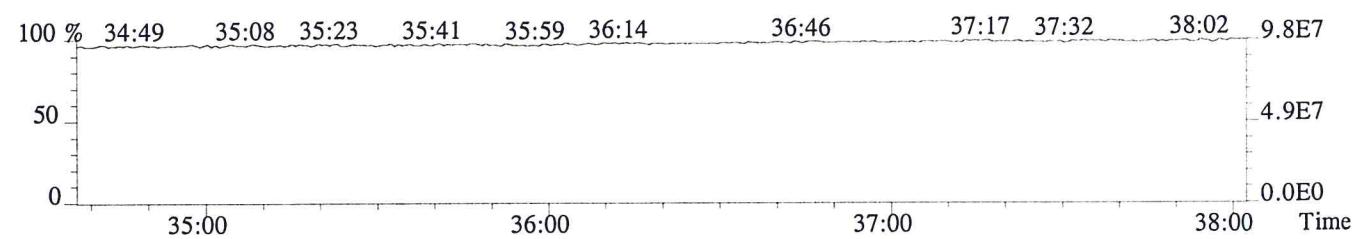
385.8610 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1552.0,0.40%,F,T)



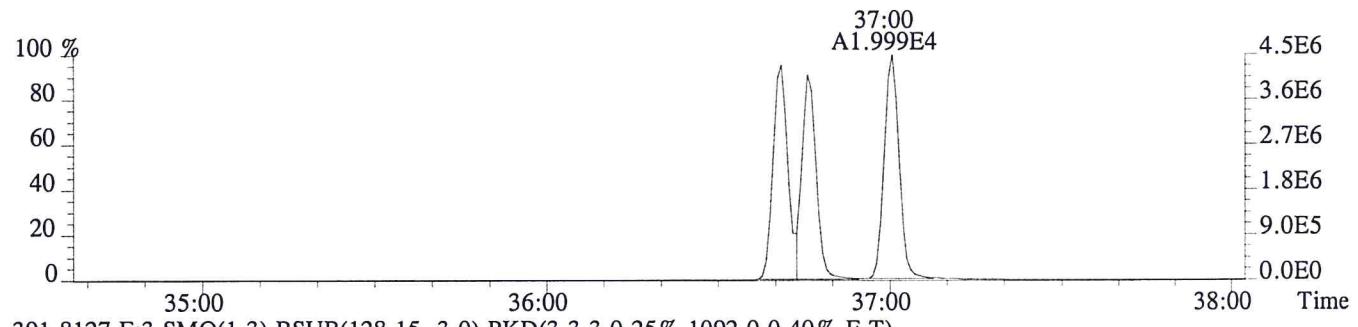
445.7555 F:3 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



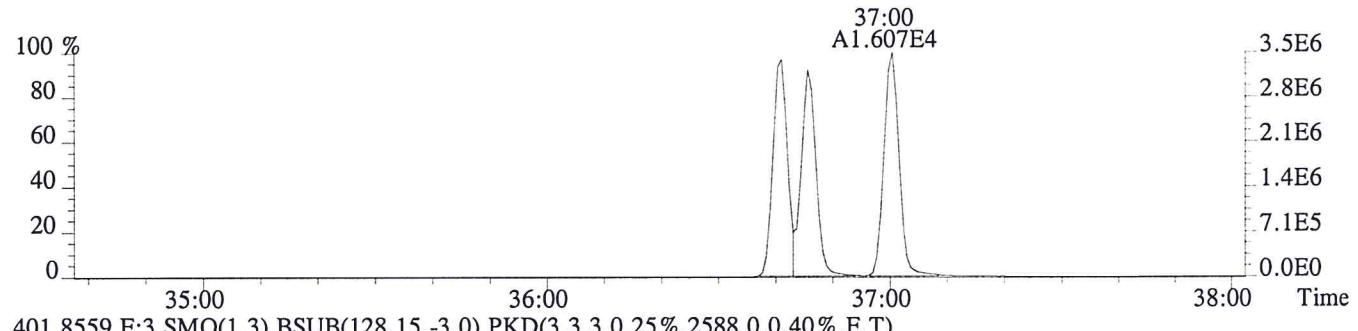
430.9729 F:3 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



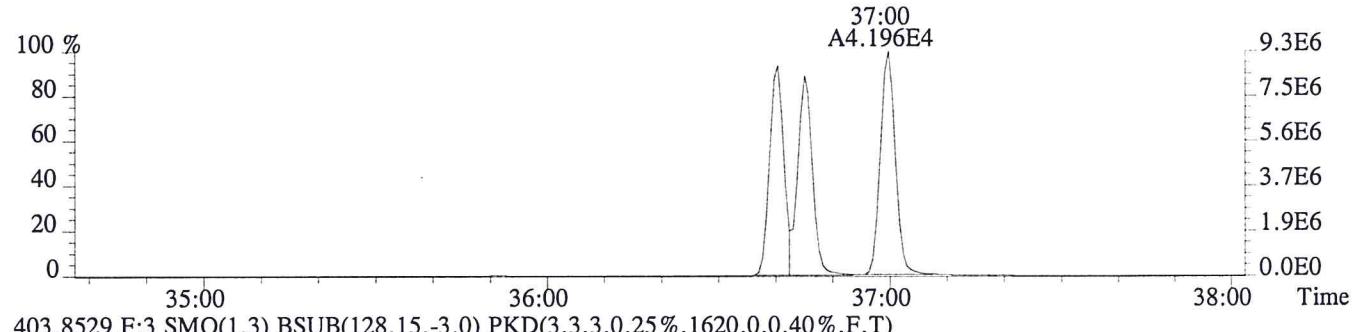
File:P600911 #1-308 Acq:12-OCT-2015 09:51:43 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:CS3  
 389.8157 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,688.0,0.40%,F,T)



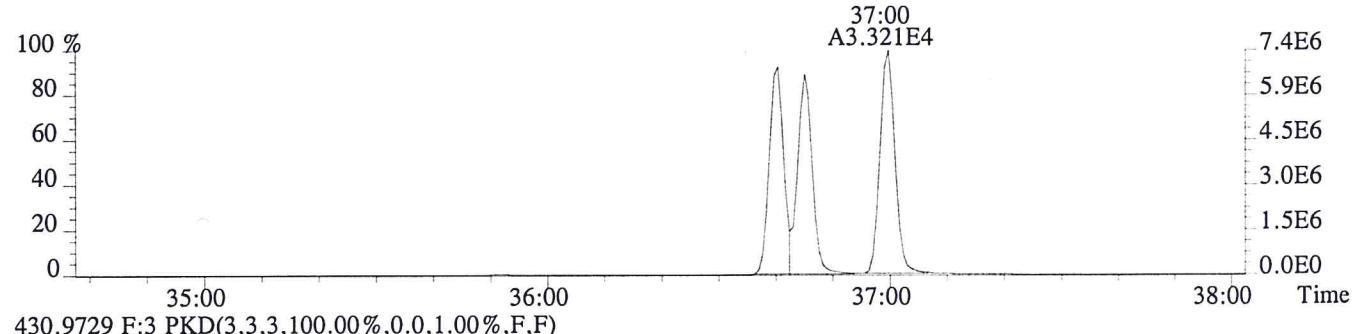
391.8127 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1092.0,0.40%,F,T)



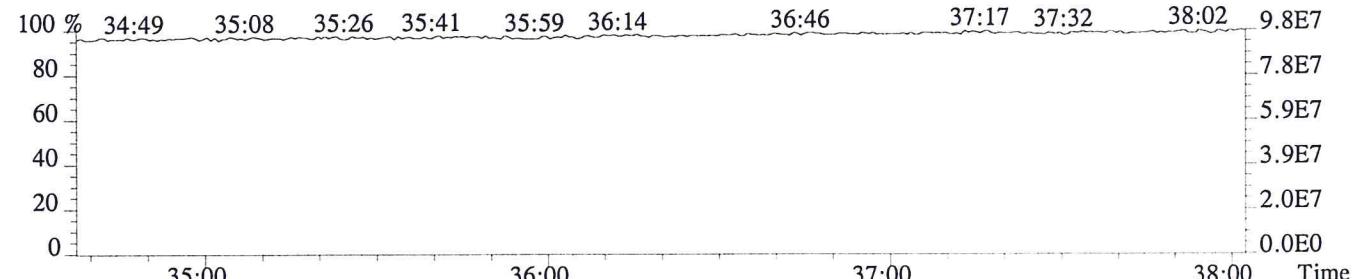
401.8559 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,2588.0,0.40%,F,T)



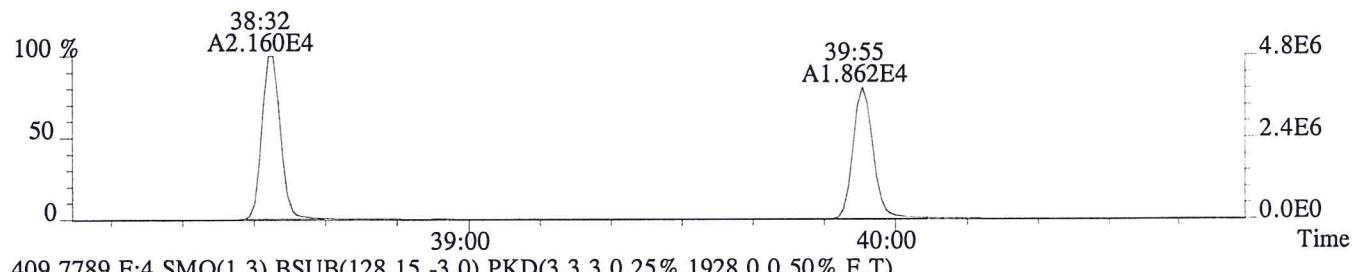
403.8529 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1620.0,0.40%,F,T)



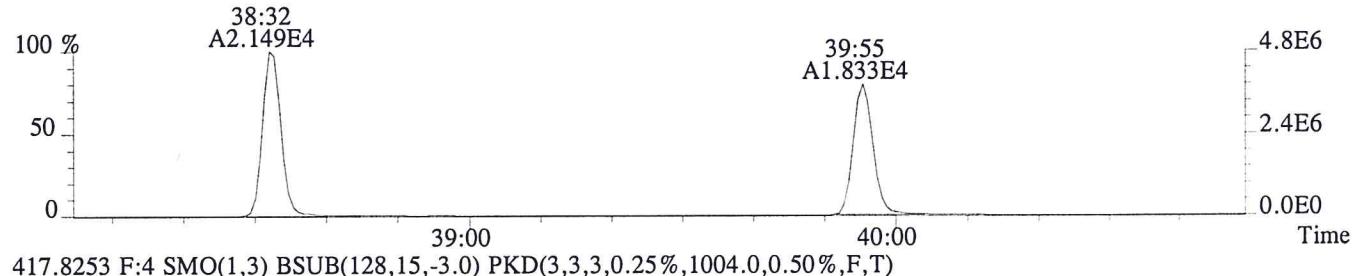
430.9729 F:3 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



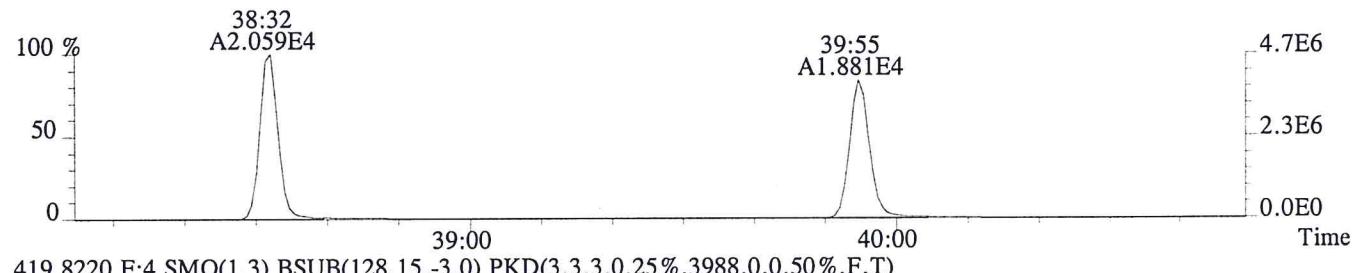
File:P600911 #1-248 Acq:12-OCT-2015 09:51:43 Probe EI+ Magnet SIR VG BioTech Mass spectr  
Sample#1 Exp:CS3  
407.7818 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1980.0,0.50%,F,T)



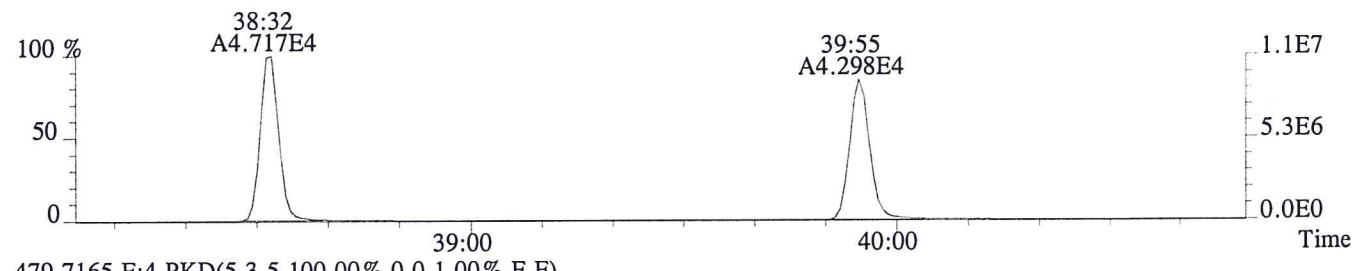
409.7789 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1928.0,0.50%,F,T)



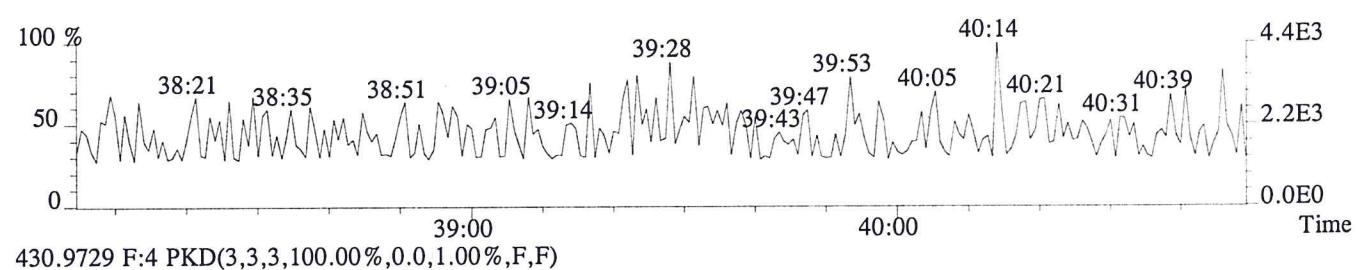
417.8253 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1004.0,0.50%,F,T)



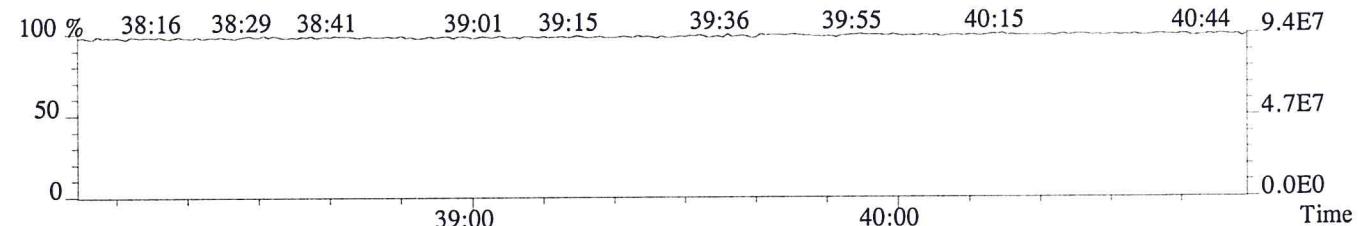
419.8220 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,3988.0,0.50%,F,T)



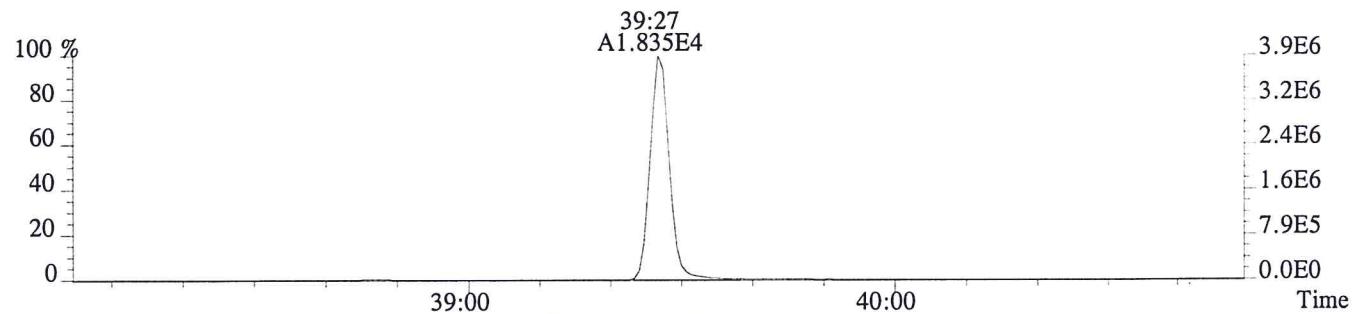
479.7165 F:4 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



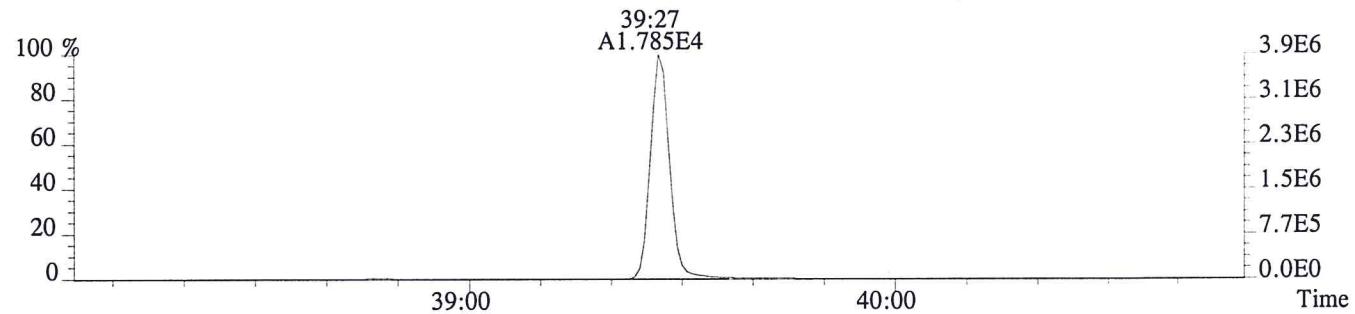
430.9729 F:4 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



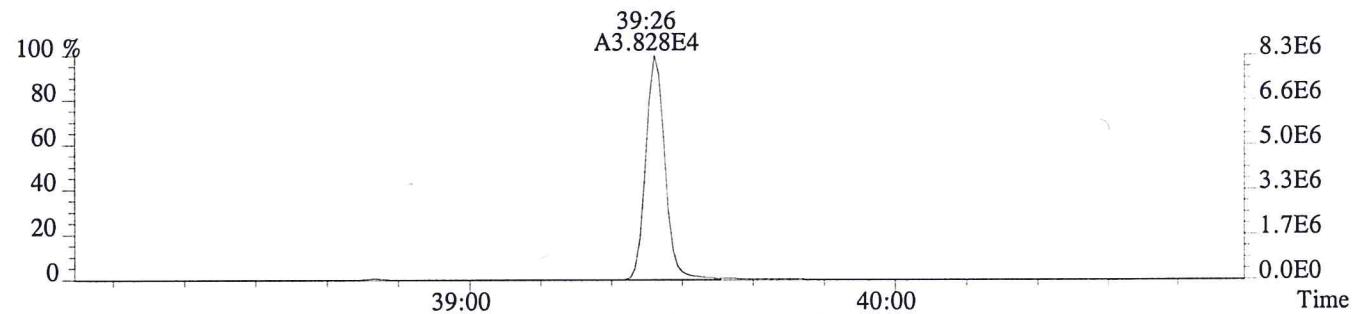
File:P600911 #1-248 Acq:12-OCT-2015 09:51:43 Probe EI+ Magnet SIR VG BioTech Mass spect<sup>f</sup>  
 Sample#1 Exp:CS3  
 423.7766 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,760.0,0.40%,F,T)



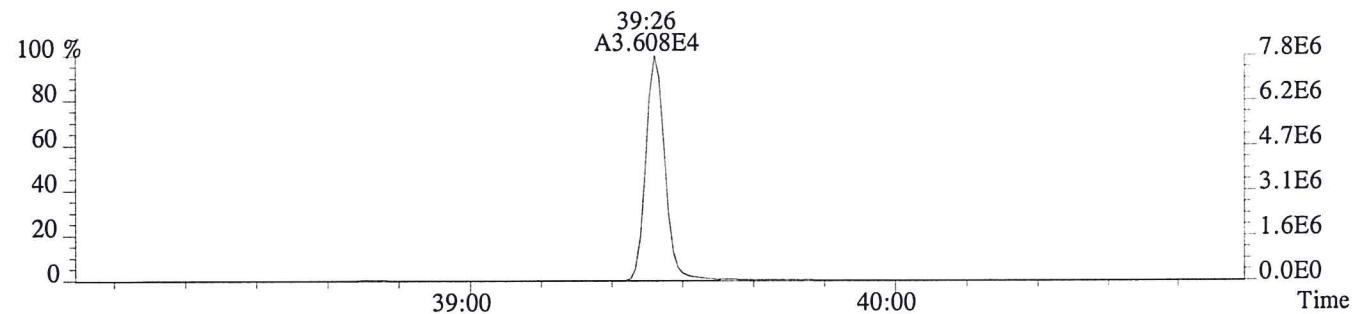
425.7737 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,744.0,0.40%,F,T)



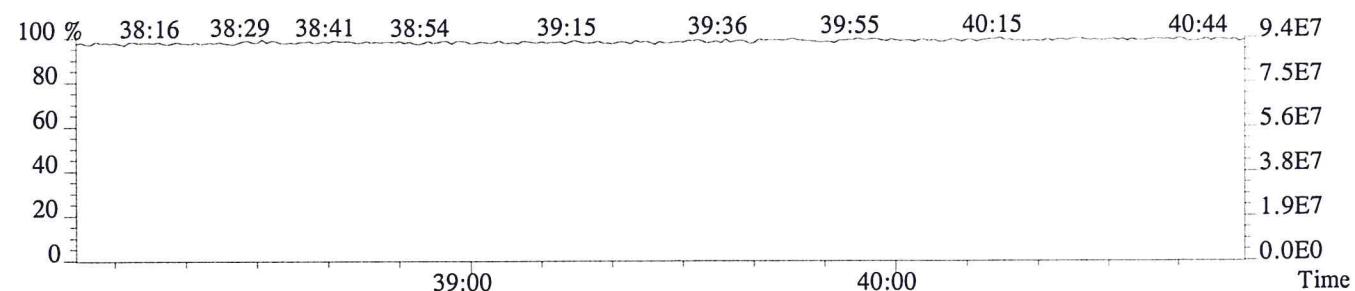
435.8169 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1236.0,0.40%,F,T)



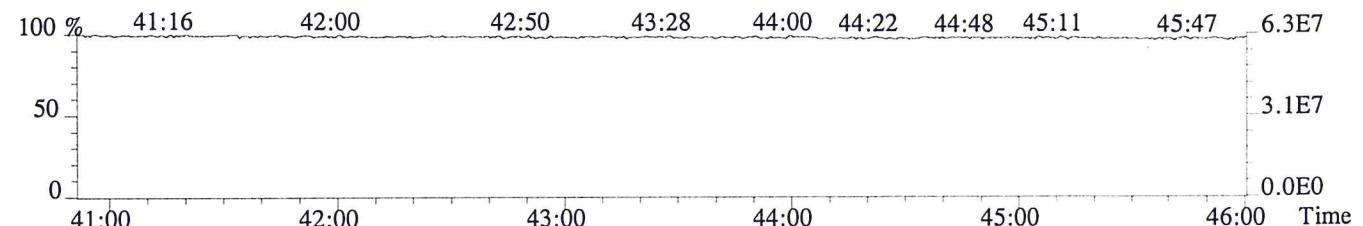
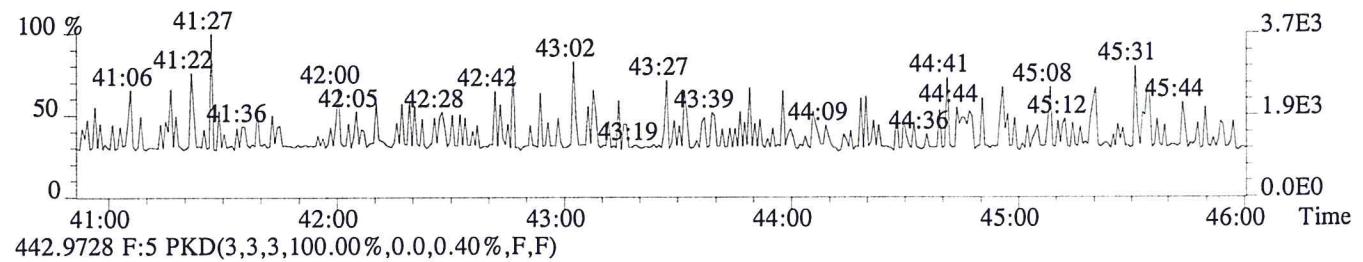
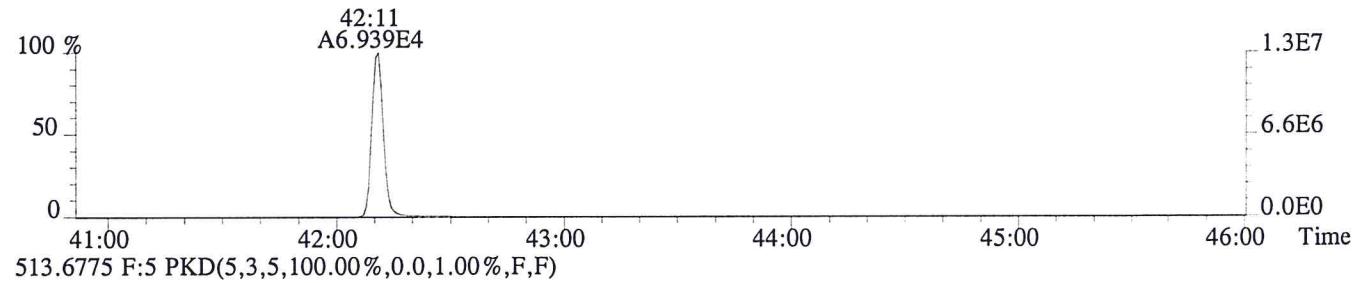
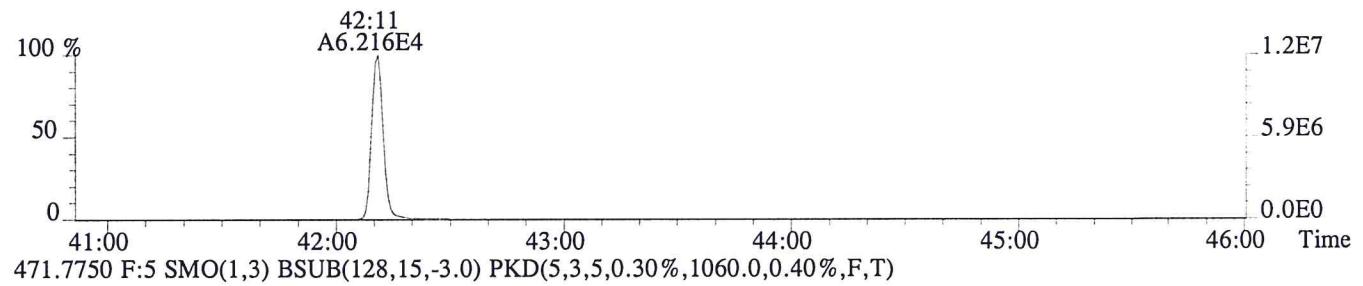
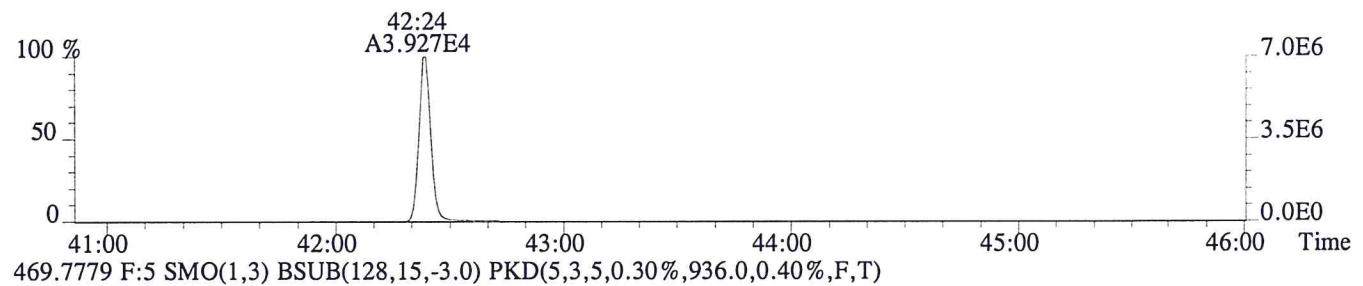
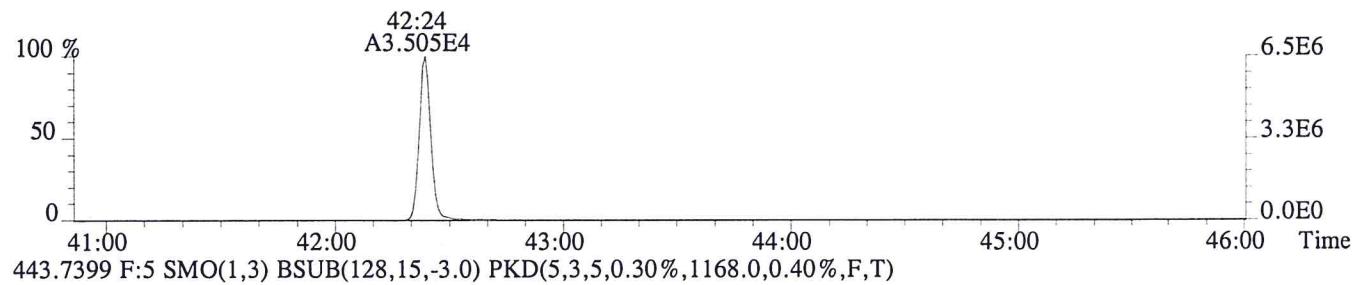
437.8140 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,656.0,0.40%,F,T)



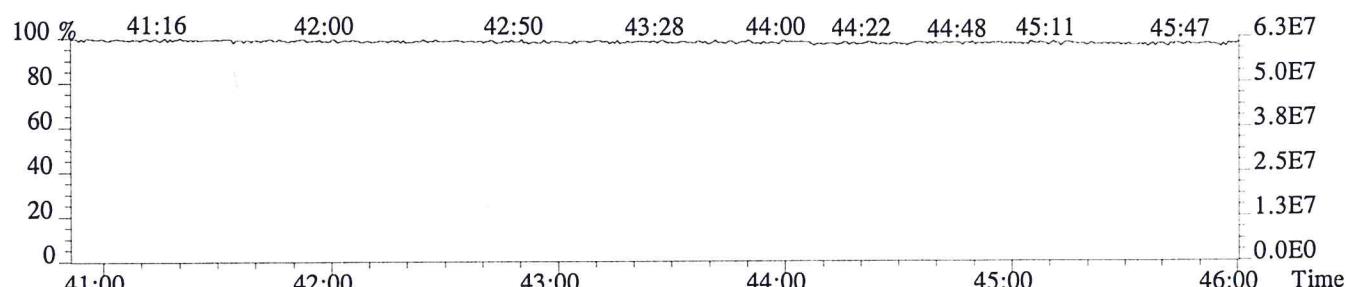
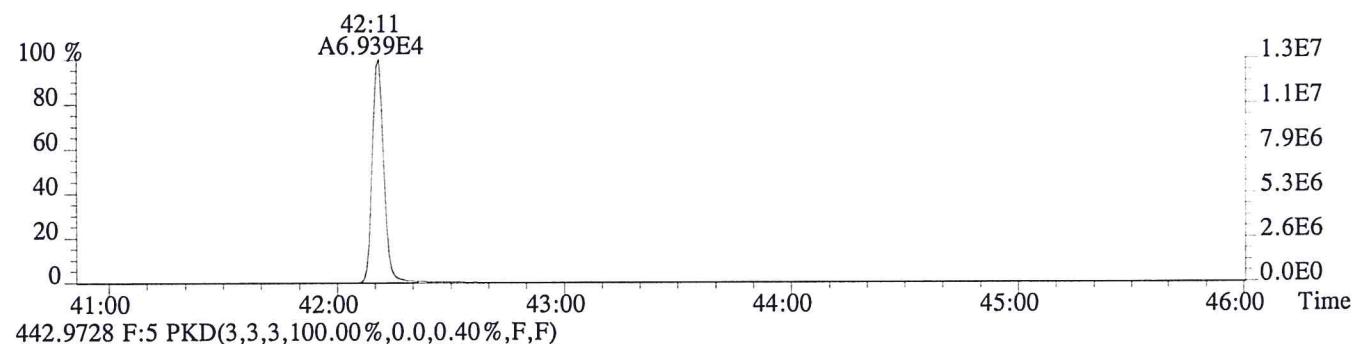
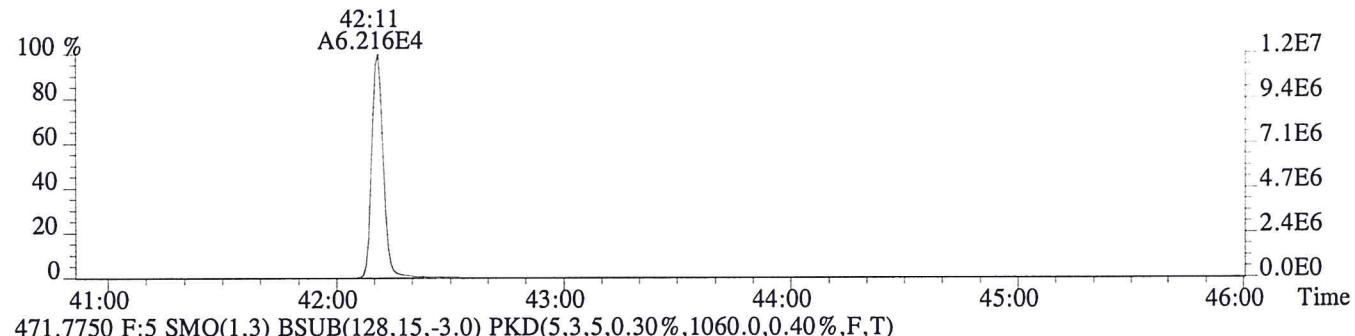
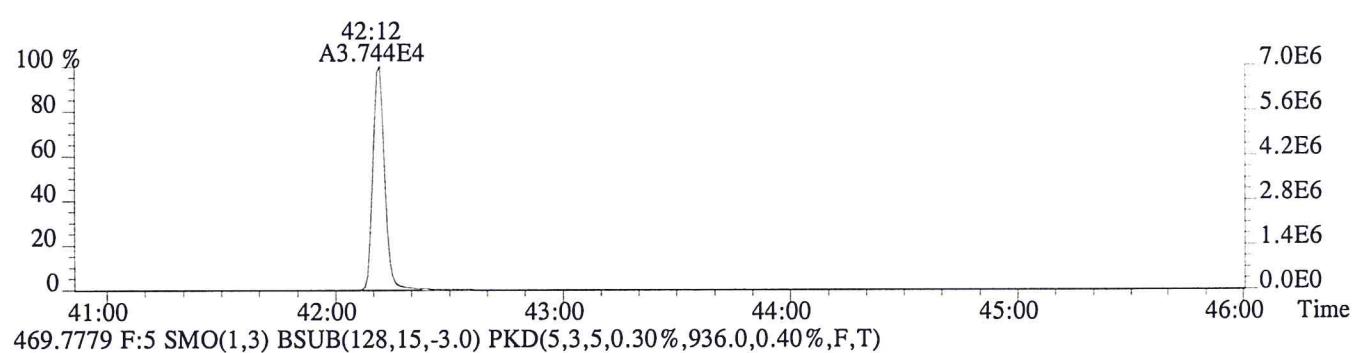
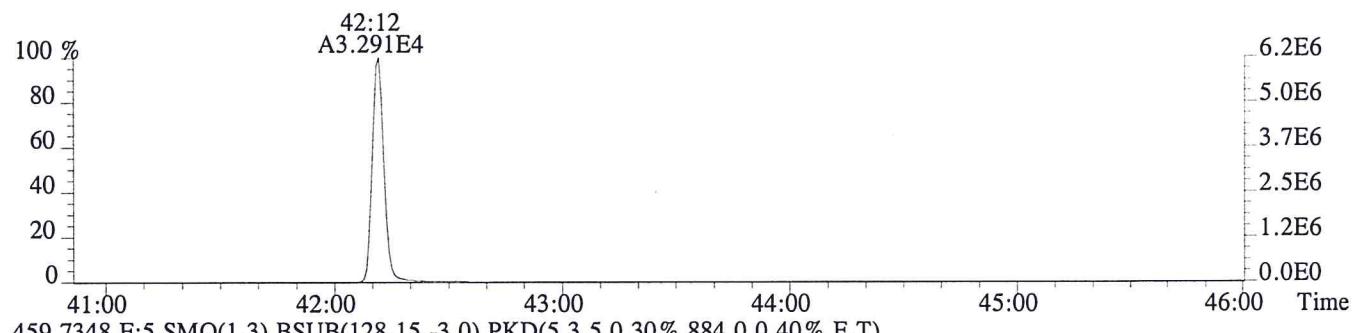
430.9729 F:4 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



File:P600911 #1-464 Acq:12-OCT-2015 09:51:43 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:CS3  
 441.7428 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,792.0,0.40%,F,T)



File:P600911 #1-464 Acq:12-OCT-2015 09:51:43 Probe EI+ Magnet SIR VG BioTech Mass spect<br/>Sample#1 Exp:CS3  
457.7377 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,512.0,0.40%,F,T)



# CCAL HRCC3/CS3 Daily Calibration QC Checklist

Calibration File Name: P100939  
 Date: 10/13/15

Circle one:  
 Beginning /  Ending

Method: 1613 / 1613E / 8290 / VCP / Tetra / TCDD Only / TCDF Conf / VCP Conf / 8280 / M23 / TO-9A

Retention Window/Column Performance Check:

Analyst

Second Check

Windows in and first and last eluters labeled	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Column Performance shows less than or equal to 25% valley between column specific 2378 isomer and its closest eluters	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
No QC ion deflections affect column specific 2378 isomer or its closest eluters (HRMS Only)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

CS3 Continuing Calibration

Analyst

Second Check

Percent RSD within method criteria	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
All relative abundance ratios meet method criteria	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
No QC ion deflections of greater than 20% (HRMS Only)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Mass spectrometer resolution greater than or equal to 10,000 and documented (HRMS Only)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2378-TCDD elutes at 25 minutes or later on the DB-5 column / DB-5MSUI column	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Signal-to-noise of all target analytes and their labeled standards at least 10:1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Valley between labeled 123478 and 123678 HxCDD peaks less than or equal to 50% (LRMS Only)	N/A	N/A
Ending Calibration injected prior to end of 12 hour clock	N/A	N/A

Analyst: \_\_\_\_\_

ccalqc.xls 07/17/12

Second QC: \_\_\_\_\_

5DFC  
PCDD/PCDF ANALYTICAL SEQUENCE SUMMARY

Lab Name: ALS ENVIRONMENTAL

Contract:

Lab Code:

Case No.:

Client No.:

SDG No.:

GC Column: DB-5MSUI ID: 0.25 (mm)

Init. Calib. Date: 08/19/15

Init. Calib.Times: 10:52

THE ANALYTICAL SEQUENCE OF STANDARDS, SAMPLES, BLANKS, AND LABORATORY CONTROL SAMPLES (LCSS) IS AS FOLLOWS:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
84084	WINDOW DEFINE	P600940	13-OCT-15	13:17:56
84080	CS3	P600939	13-OCT-15	12:29:16
METHOD BLANK	EQ1500565-01	P600941	13-OCT-15	15:24:26
METHOD BLANK	EQ1500602-01	P600942	13-OCT-15	16:12:14
STE-07222015-24HR	R1505980-001RE	P600943	13-OCT-15	17:01:19
AQ 1.5-LOD-1613	E1500630-001RE	P600944	13-OCT-15	17:50:24
AQ 5-LO6-1613	E1500630-002	P600945	13-OCT-15	18:39:28
TISSUE 1.5-LOD-1613	E1500630-003	P600946	13-OCT-15	19:28:34
TISSUE 5-LOQ-1613	E1500630-004	P600947	13-OCT-15	20:17:35
SMS 1.5-LOD-1613	E1500630-005	P600948	13-OCT-15	21:06:39
SMS 5-LOQ-1613	E1500630-006	P600949	13-OCT-15	21:55:45

## Sample List Report

## MassLynx 4.1 SCN815 SCN795

Sample List: C:\MassLynx\EHRSMS08.PRO\SampleDB\20151013.SPL  
 Last Modified: Wednesday, October 14, 2015 16:04:05 Eastern Daylight Time  
 Printed: Wednesday, October 14, 2015 16:04:19 Eastern Daylight Time

Page 1 of 2

Page Position (1, 1)

*OPUS 4(e) P60093ares*

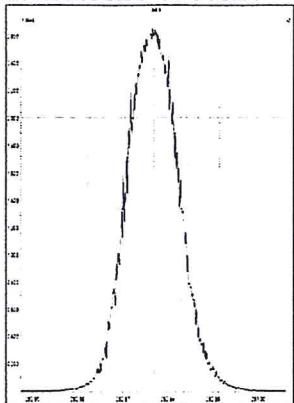
Date	Time	File Name	Lab Sample ID	Client File Text	Bottle	MS File	Inlet File	Analyst	Comments
1 10/13/15	12:29	P600939	84080	CS3	Tray1:1	EPA1613_ALS	Dioxin_ALS	<i>LZ</i>	HRMS Check 12:22
2	13:17	P600940	84084	WD	Tray1:2	EPA1613_ALS	Dioxin_ALS	<i>LZ</i>	
3	15:24	P600941	EQ1500565-01	MB	Tray1:3	EPA1613_ALS	Dioxin_ALS	<i>LZ</i>	
4	16:12	P600942	EQ1500602-01	MB	Tray1:4	EPA1613_ALS	Dioxin_ALS	<i>LZ</i>	HRMS Check 15:01
5	17:01	P600943	R1505980-001RE	R1505980-001RE	Tray1:5	EPA1613_ALS	Dioxin_ALS	<i>LZ</i>	
6	17:50	P600944	E1500630-001RE	E1500630-001RE	Tray1:6	EPA1613_ALS	Dioxin_ALS	<i>LZ</i>	
7	18:39	P600945	E1500630-002	E1500630-002	Tray1:7	EPA1613_ALS	Dioxin_ALS	<i>LZ</i>	
8	19:28	P600946	E1500630-003	E1500630-003	Tray1:8	EPA1613_ALS	Dioxin_ALS	<i>LZ</i>	
9	20:17	P600947	E1500630-004	E1500630-004	Tray1:9	EPA1613_ALS	Dioxin_ALS	<i>LZ</i>	
10	21:06	P600948	E1500630-005	E1500630-005	Tray1:10	EPA1613_ALS	Dioxin_ALS	<i>LZ</i>	
11	21:55	P600949	E1500630-006	E1500630-006	Tray1:11	EPA1613_ALS	Dioxin_ALS	<i>LZ</i>	
12		P600950	E1500632-001	E1500632-001	Tray1:12	EPA1613_ALS	Dioxin_ALS	<i>LZ</i>	
13		P600951	E1500632-002	E1500632-002	Tray1:13	EPA1613_ALS	Dioxin_ALS	<i>LZ</i>	
14	10/14/15 00:22	P600952	TEST	TEST	Tray1:14	EPA1613_ALS	Dioxin_ALS	<i>LZ</i>	
15	01:11	P600953	84080	CS3	Tray1:15	EPA1613_ALS	Dioxin_ALS	<i>LZ</i>	
16				---	Tray1:16	EPA1613_ALS	Dioxin_ALS	<i>LZ</i>	HRMS Check 02:09
17				---	Tray1:17	EPA1613_ALS	Dioxin_ALS	<i>LZ</i>	
18				---	Tray1:18	EPA1613_ALS	Dioxin_ALS	<i>LZ</i>	
19				---	Tray1:19	EPA1613_ALS	Dioxin_ALS	<i>LZ</i>	
20				---	Tray1:20	EPA1613_ALS	Dioxin_ALS	<i>LZ</i>	
21				---	Tray1:21	EPA1613_ALS	Dioxin_ALS	<i>LZ</i>	
22				---	Tray1:22	EPA1613_ALS	Dioxin_ALS	<i>LZ</i>	
23				---	Tray1:23	EPA1613_ALS	Dioxin_ALS	<i>LZ</i>	
24				---	Tray1:24	EPA1613_ALS	Dioxin_ALS	<i>LZ</i>	
25				---	Tray1:25	EPA1613_ALS	Dioxin_ALS	<i>LZ</i>	
26				---	Tray1:26	EPA1613_ALS	Dioxin_ALS	<i>LZ</i>	
27				---	Tray1:27	EPA1613_ALS	Dioxin_ALS	<i>LZ</i>	
28				---	Tray1:28	EPA1613_ALS	Dioxin_ALS	<i>LZ</i>	
29				---	Tray1:29	EPA1613_ALS	Dioxin_ALS	<i>LZ</i>	
30				---	Tray1:30	EPA1613_ALS	Dioxin_ALS	<i>LZ</i>	
31				---	Tray1:31	EPA1613_ALS	Dioxin_ALS	<i>LZ</i>	
32				---	Tray1:32	EPA1613_ALS	Dioxin_ALS	<i>LZ</i>	
33				---	Tray1:33	EPA1613_ALS	Dioxin_ALS	<i>LZ</i>	
34				---	Tray1:34	EPA1613_ALS	Dioxin_ALS	<i>LZ</i>	
35				---	Tray1:35	EPA1613_ALS	Dioxin_ALS	<i>LZ</i>	
36				---	Tray1:36	EPA1613_ALS	Dioxin_ALS	<i>LZ</i>	
37				---	Tray1:37	EPA1613_ALS	Dioxin_ALS	<i>LZ</i>	
38				---	Tray1:38	EPA1613_ALS	Dioxin_ALS	<i>LZ</i>	
39				---	Tray1:39	EPA1613_ALS	Dioxin_ALS	<i>LZ</i>	

*JP*  
10/22/15  
079

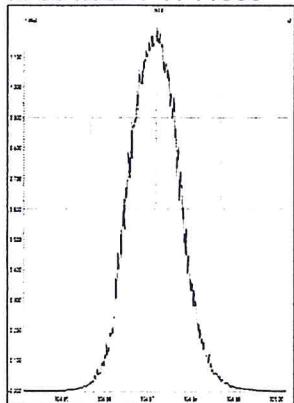
File: Experiment: EPA1613\_ALS.exp Reference: pfk.ref Function: 1 @ 200 (ppm)

Printed: Tuesday, October 13, 2015 12:22:41 Eastern Daylight Time

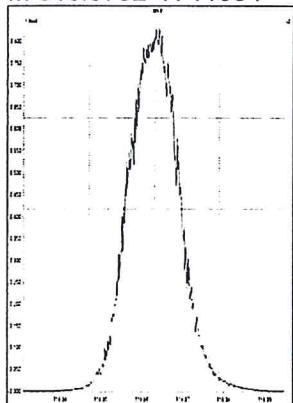
M 292.9824 R 11521



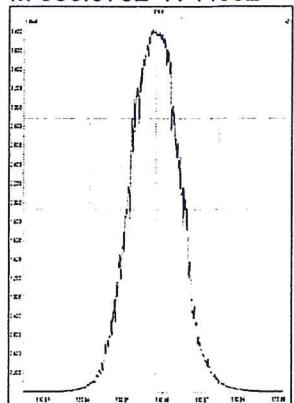
M 304.9824 R 11680



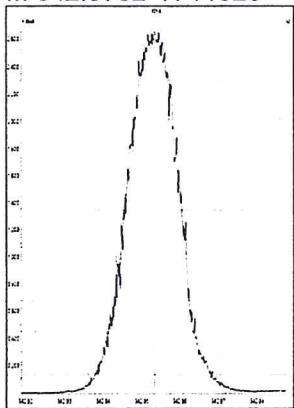
M 318.9792 R 11684



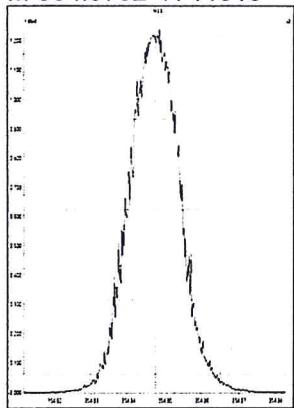
M 330.9792 R 11682



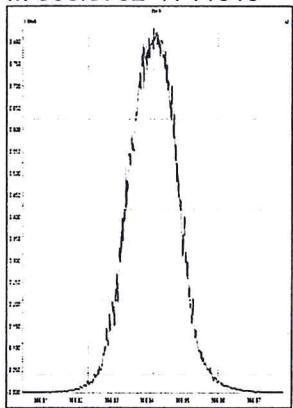
M 342.9792 R 11625



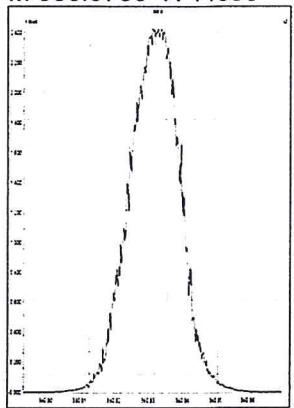
M 354.9792 R 11313



M 366.9792 R 11519



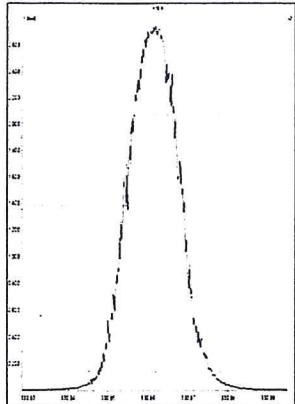
M 380.9760 R 11850



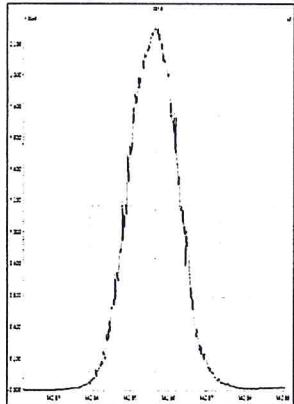
File: Experiment: EPA1613\_ALS.exp Reference: pfk.ref Function: 2 @ 200 (ppm)

Printed: Tuesday, October 13, 2015 12:23:33 Eastern Daylight Time

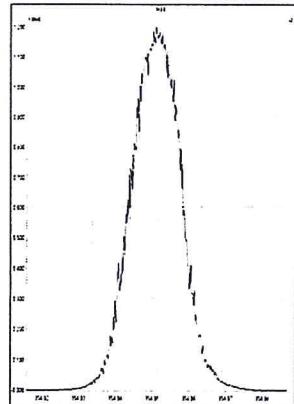
M 330.9792 R 11682



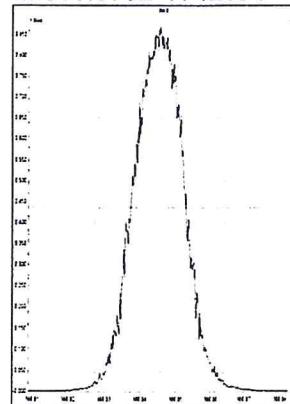
M 342.9792 R 11465



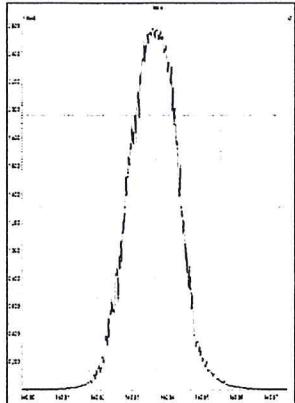
M 354.9792 R 11793



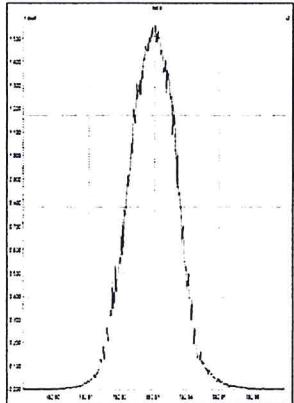
M 366.9792 R 12134



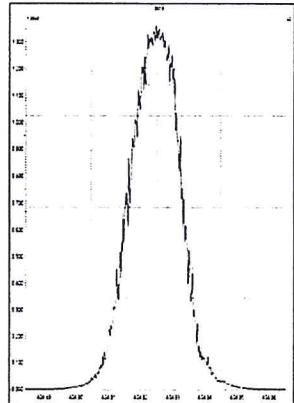
M 380.9760 R 12021



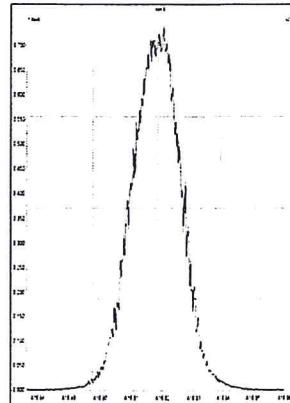
M 392.9760 R 11962



M 404.9760 R 11572



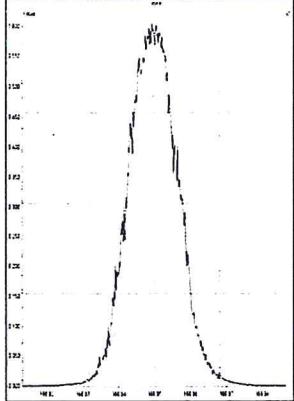
M 416.9760 R 11624



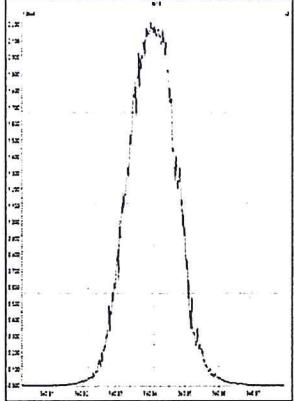
File: Experiment: EPA1613\_ALS.exp Reference: pkf.ref Function: 3 @ 200 (ppm)

Printed: Tuesday, October 13, 2015 12:24:13 Eastern Daylight Time

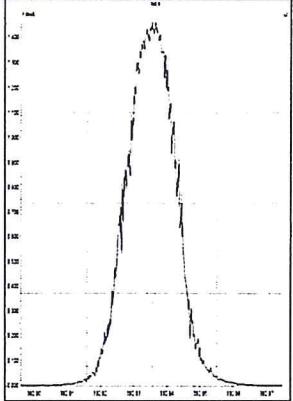
M 366.9792 R 11681



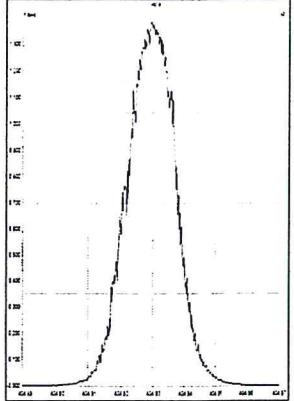
M 380.9760 R 12435



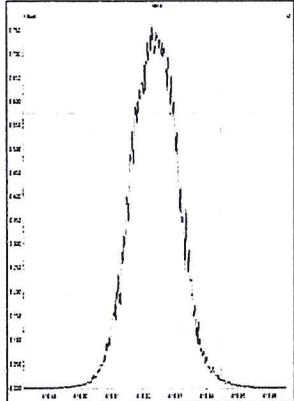
M 392.9760 R 12077



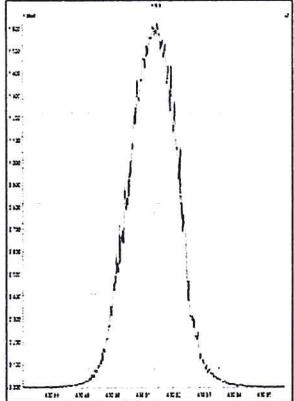
M 404.9760 R 11847



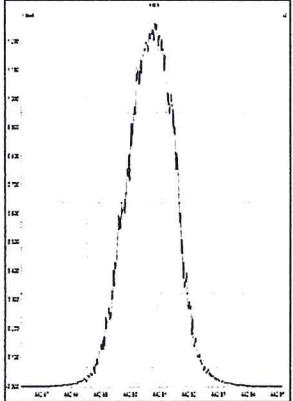
M 416.9760 R 11958



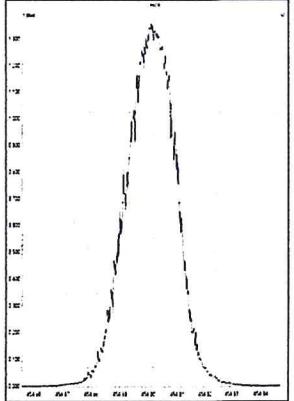
M 430.9728 R 12195



M 442.9728 R 12017



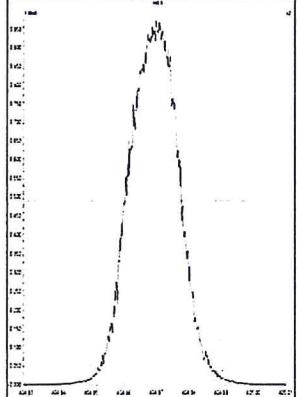
M 454.9728 R 11849



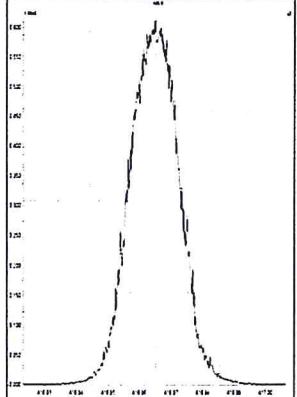
File: Experiment: EPA1613\_ALS.exp Reference: pkf.ref Function: 4 @ 200 (ppm)

Printed: Tuesday, October 13, 2015 12:24:49 Eastern Daylight Time

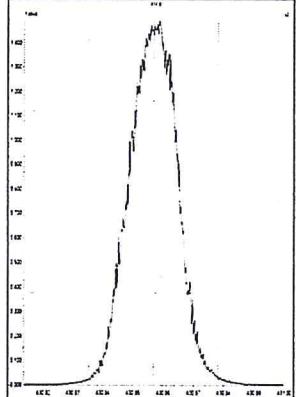
M 404.9760 R 12019



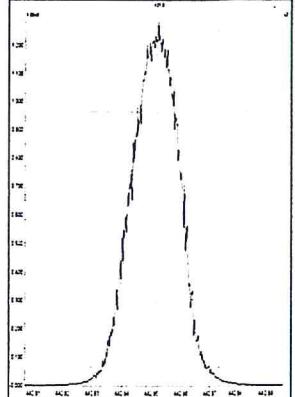
M 416.9760 R 12138



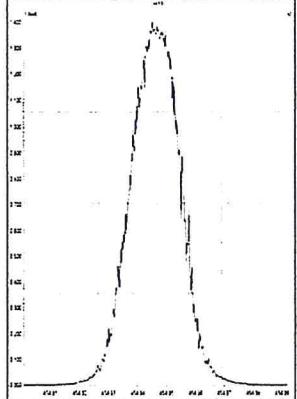
M 430.9728 R 12316



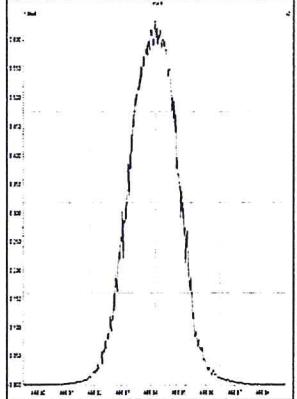
M 442.9728 R 12437



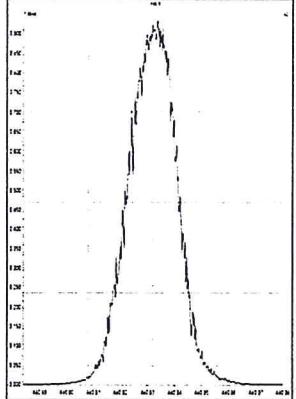
M 454.9728 R 12134



M 466.9728 R 12136



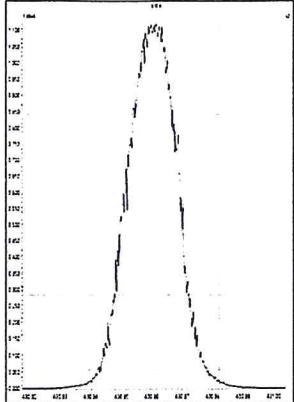
M 480.9696 R 12018



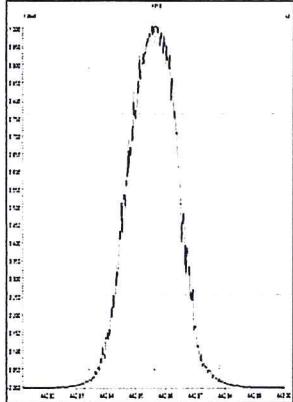
File: Experiment: EPA1613\_ALS.exp Reference: pkf.ref Function: 5 @ 200 (ppm)

Printed: Tuesday, October 13, 2015 12:25:31 Eastern Daylight Time

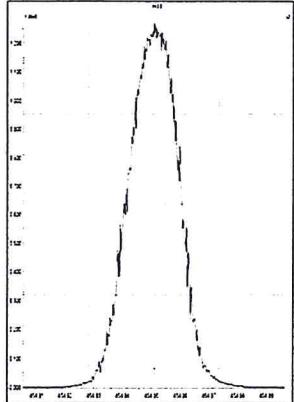
M 430.9728 R 12439



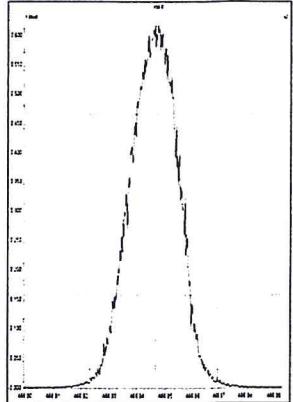
M 442.9728 R 12194



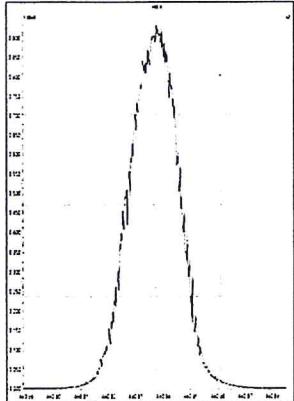
M 454.9728 R 12440



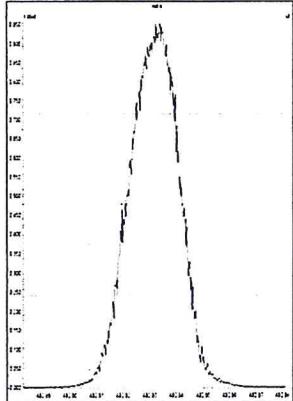
M 466.9728 R 12372



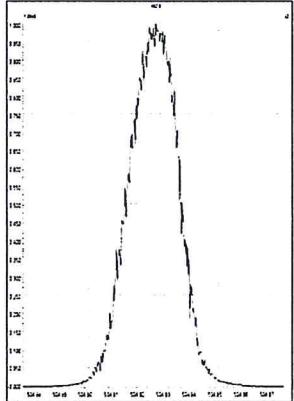
M 480.9696 R 12018



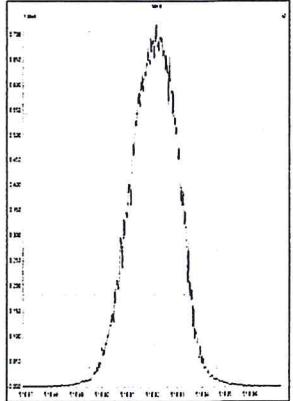
M 492.9696 R 12378



M 504.9696 R 12255



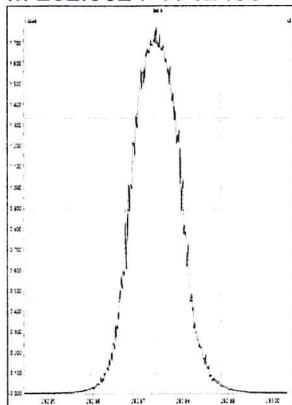
M 516.9697 R 11903



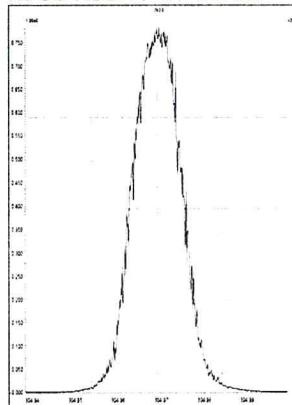
File: Experiment: EPA1613\_ALS.exp Reference: pfk.ref Function: 1 @ 200 (ppm)

Printed: Tuesday, October 13, 2015 15:01:59 Eastern Daylight Time

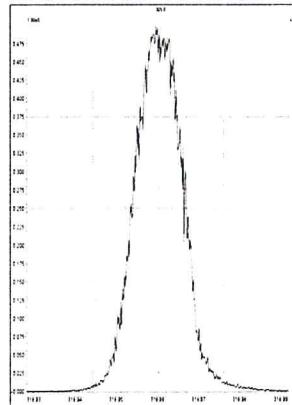
M 292.9824 R 12438



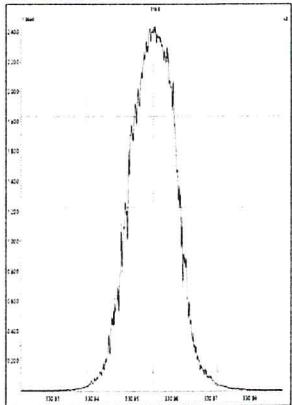
M 304.9824 R 12752



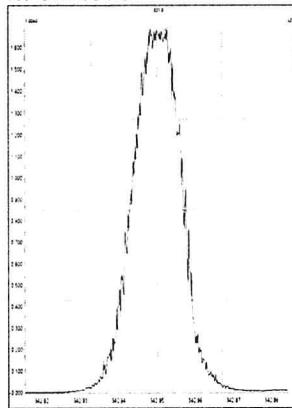
M 318.9792 R 12439



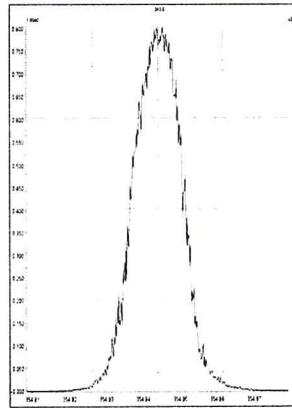
M 330.9792 R 12820



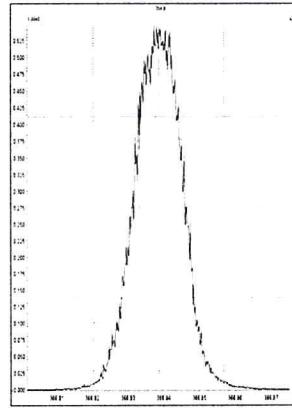
M 342.9792 R 12823



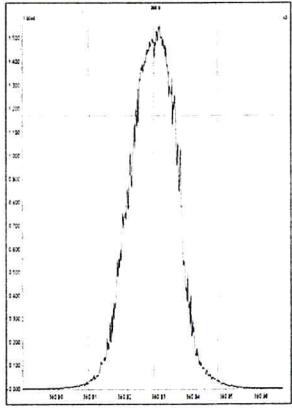
M 354.9792 R 12691



M 366.9792 R 12253



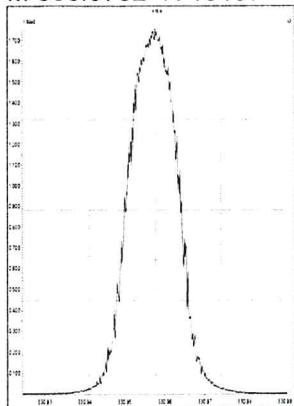
M 380.9760 R 12378



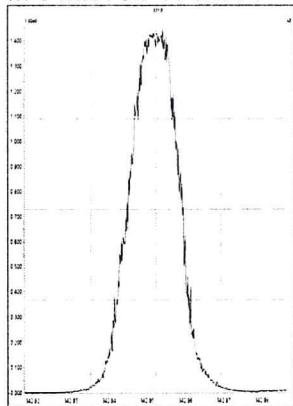
File: Experiment: EPA1613\_ALS.exp Reference: pkf.ref Function: 2 @ 200 (ppm)

Printed: Tuesday, October 13, 2015 15:02:38 Eastern Daylight Time

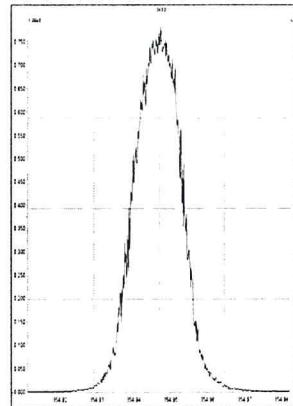
M 330.9792 R 13157



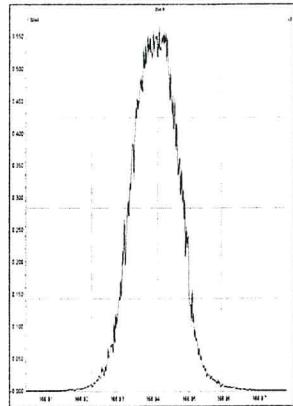
M 342.9792 R 12884



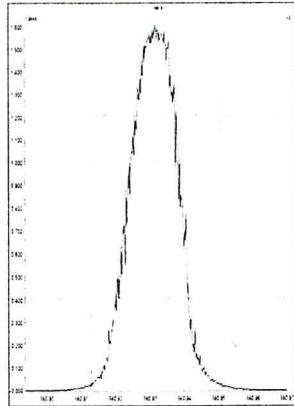
M 354.9792 R 12627



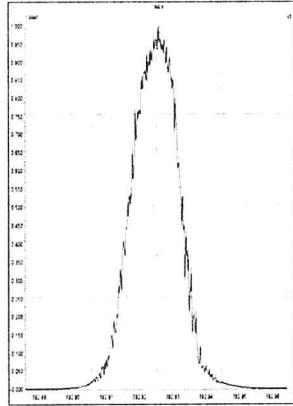
M 366.9792 R 12890



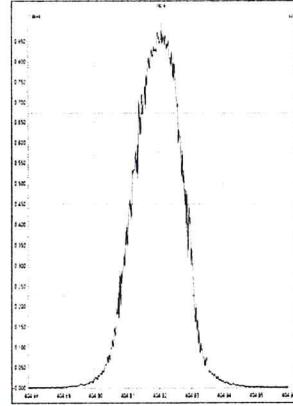
M 380.9760 R 12752



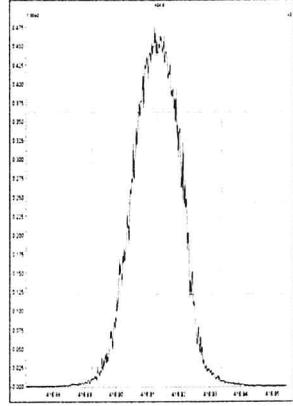
M 392.9760 R 13089



M 404.9760 R 12498



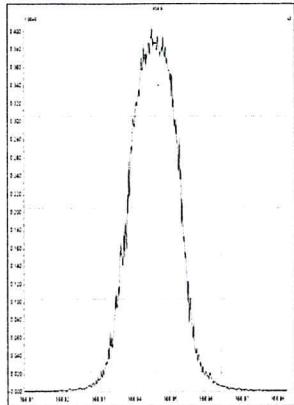
M 416.9760 R 12821



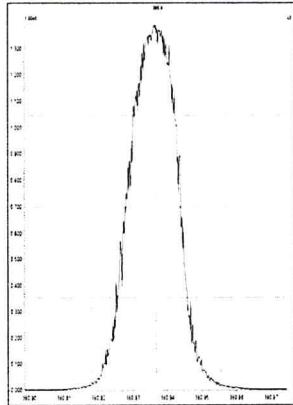
File: Experiment: EPA1613\_ALS.exp Reference: pfk.ref Function: 3 @ 200 (ppm)

Printed: Tuesday, October 13, 2015 15:03:09 Eastern Daylight Time

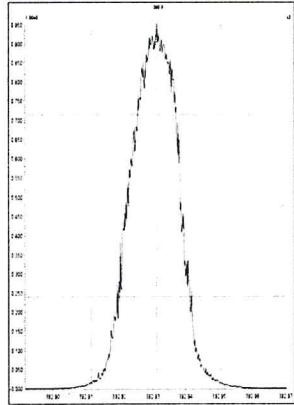
M 366.9792\_R 13156



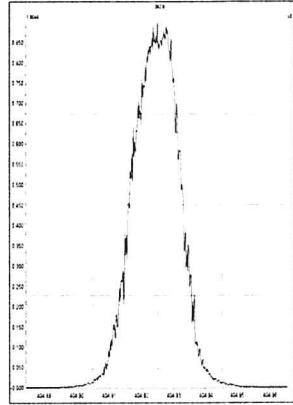
M 380.9760\_R 13023



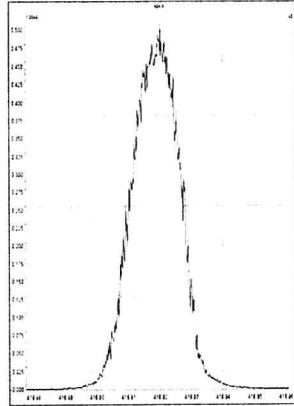
M 392.9760\_R 13228



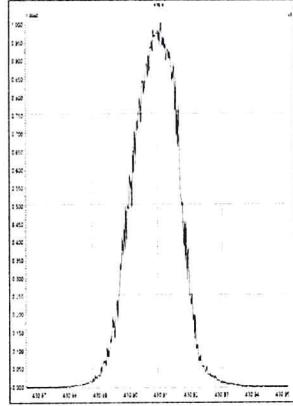
M 404.9760\_R 13019



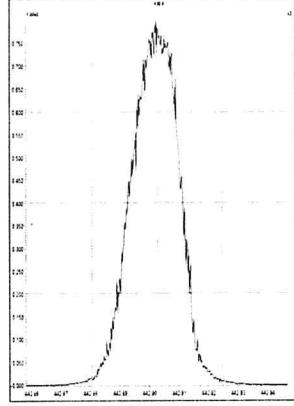
M 416.9760\_R 12817



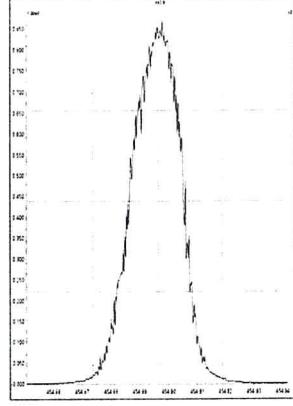
M 430.9728\_R 12755



M 442.9728\_R 12688



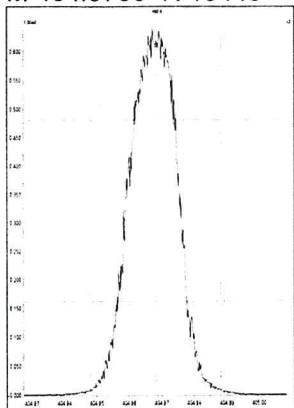
M 454.9728\_R 12500



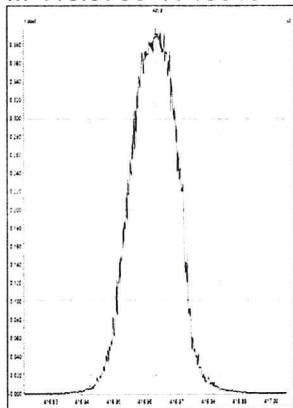
File: Experiment: EPA1613\_ALS.exp Reference: pfk.ref Function: 4 @ 200 (ppm)

Printed: Tuesday, October 13, 2015 15:03:38 Eastern Daylight Time

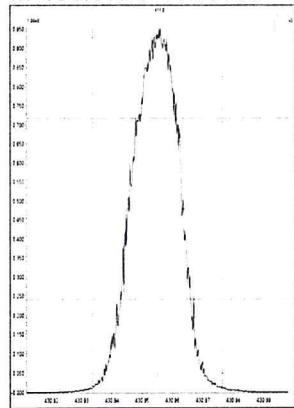
M 404.9760 R 13440



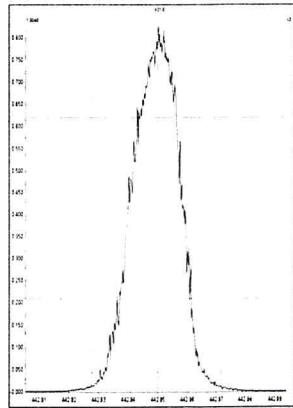
M 416.9760 R 13018



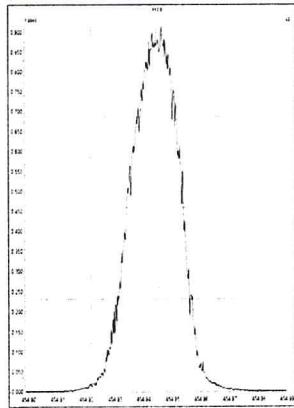
M 430.9728 R 13085



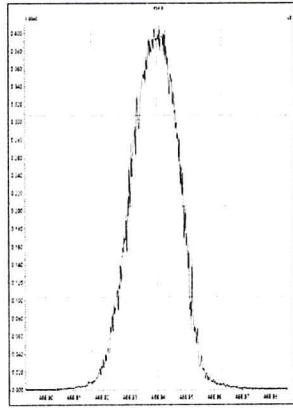
M 442.9728 R 12820



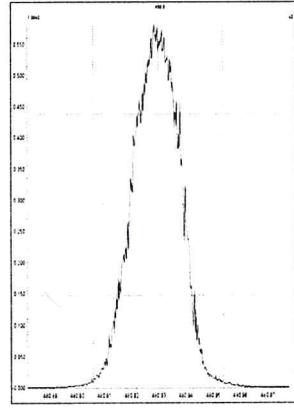
M 454.9728 R 12757



M 466.9728 R 12686



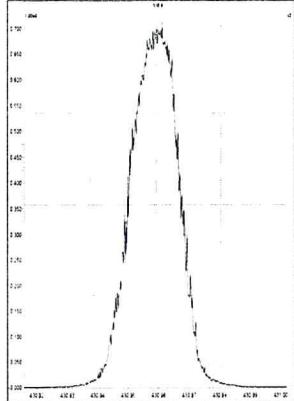
M 480.9696 R 12629



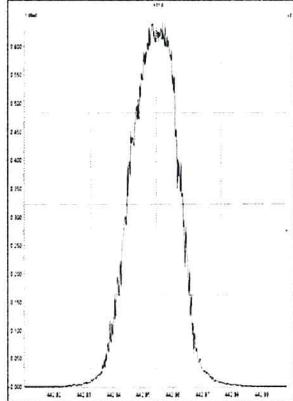
File: Experiment: EPA1613\_ALS.exp Reference: pkf.ref Function: 5 @ 200 (ppm)

Printed: Tuesday, October 13, 2015 15:04:16 Eastern Daylight Time

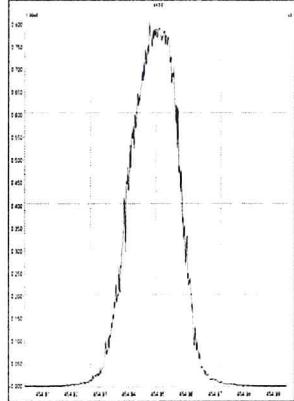
M 430.9728 R 13090



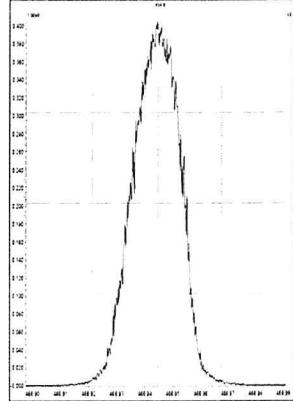
M 442.9728 R 13088



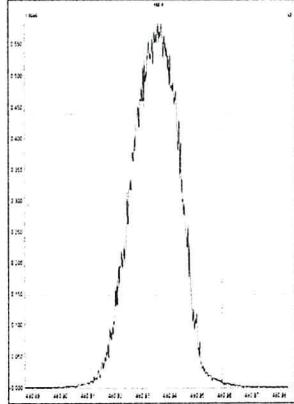
M 454.9728 R 12818



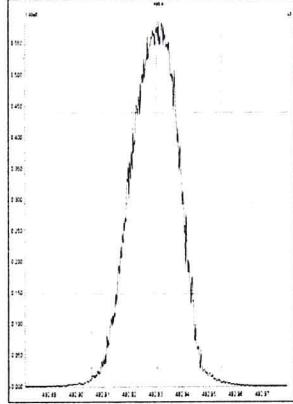
M 466.9728 R 13514



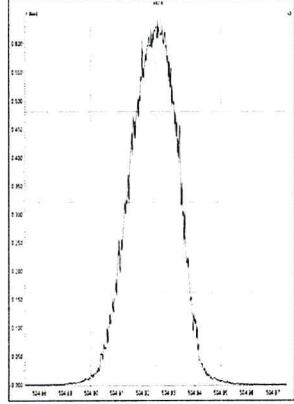
M 480.9696 R 12754



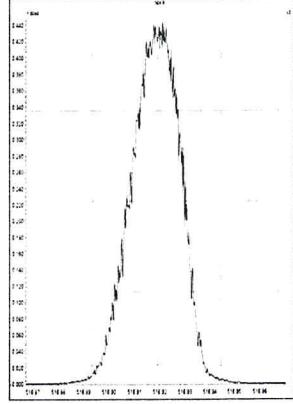
M 492.9696 R 13225



M 504.9696 R 12626

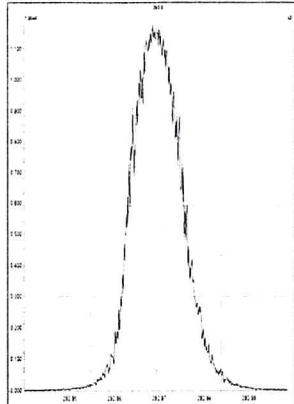


M 516.9697 R 12201

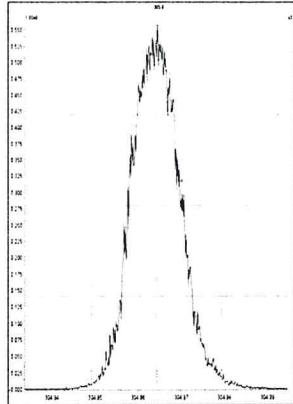


Printed: Wednesday, October 14, 2015 02:09:14 Eastern Daylight Time

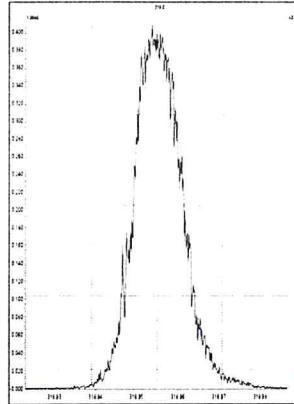
M 292.9824 R 12079



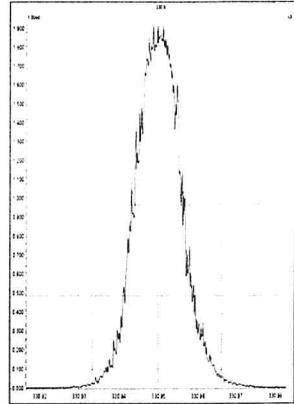
M 304.9824 R 11792



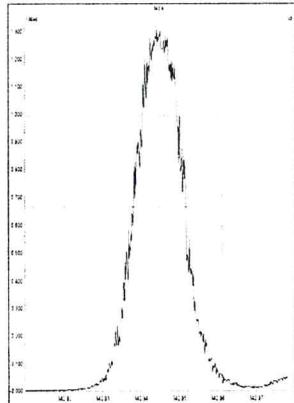
M 318.9792 R 12237



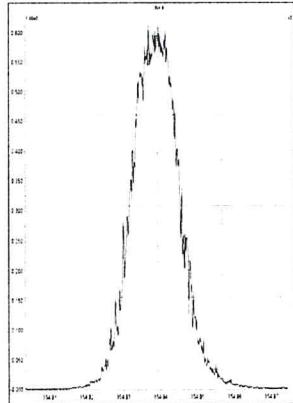
M 330.9792 R 12316



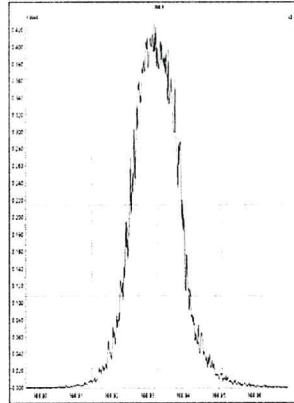
M 342.9792 R 12257



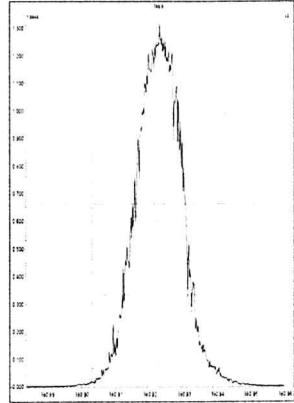
M 354.9792 R 12612



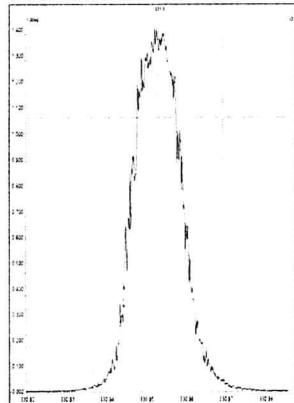
M 366.9792 R 11940



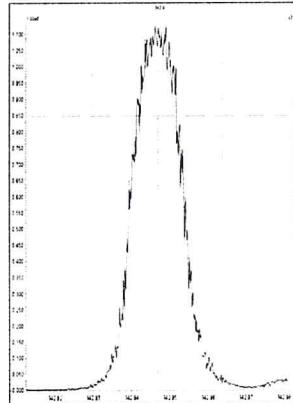
M 380.9760 R 11990



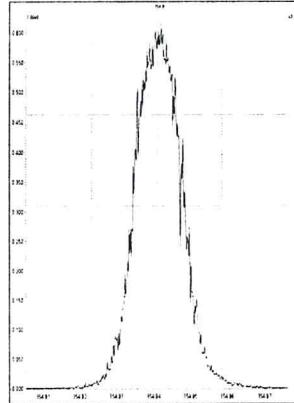
M 330.9792 R 12821



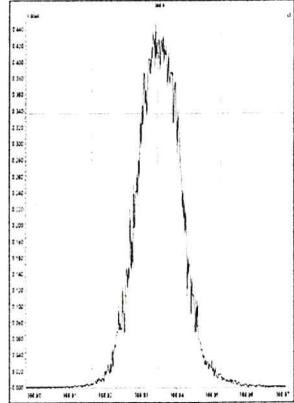
M 342.9792 R 12502



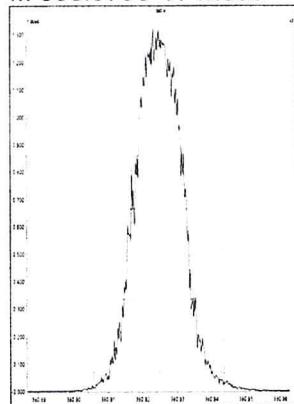
M 354.9792 R 12889



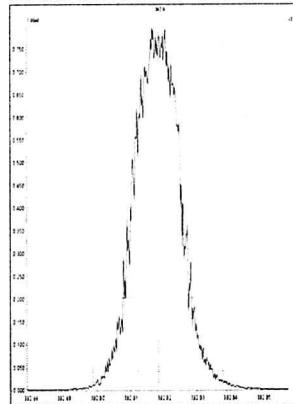
M 366.9792 R 13001



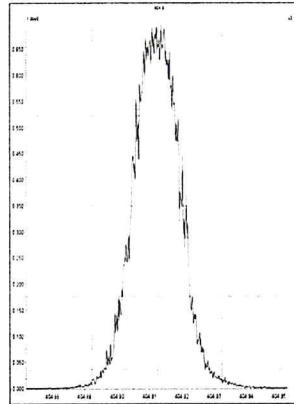
M 380.9760 R 12853



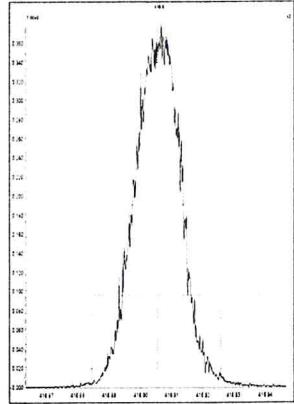
M 392.9760 R 12652



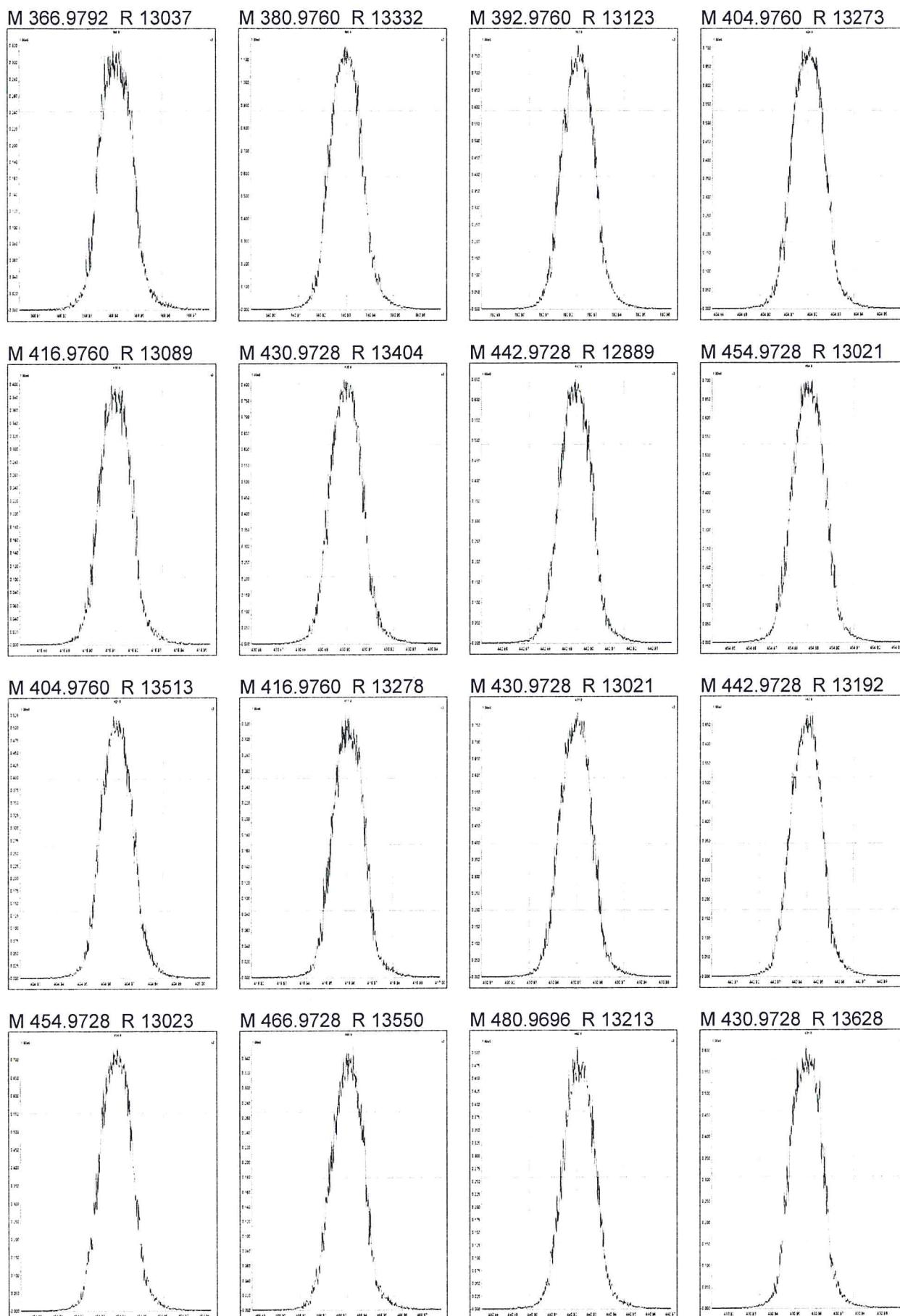
M 404.9760 R 12853



M 416.9760 R 12611

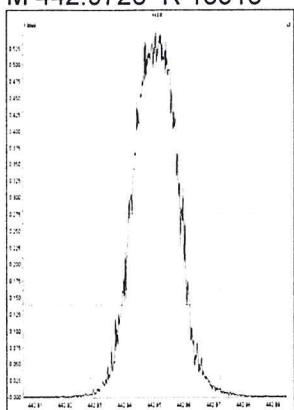


Printed: Wednesday, October 14, 2015 02:09:14 Eastern Daylight Time

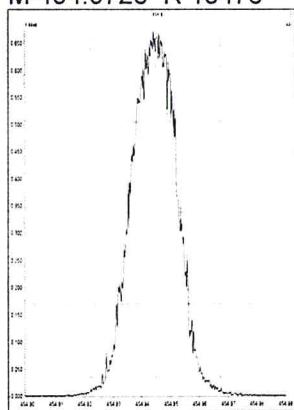


Printed: Wednesday, October 14, 2015 02:09:14 Eastern Daylight Time

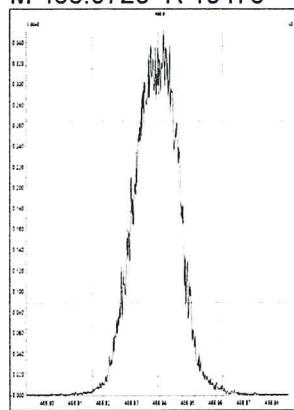
M 442.9728 R 13513



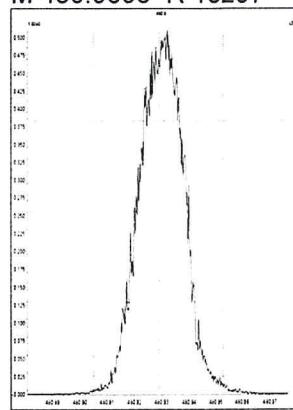
M 454.9728 R 13476



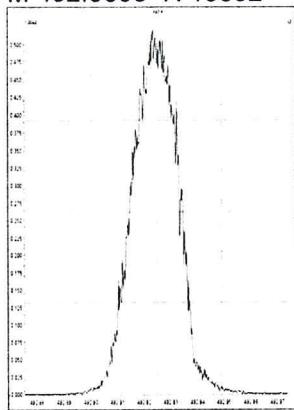
M 466.9728 R 13476



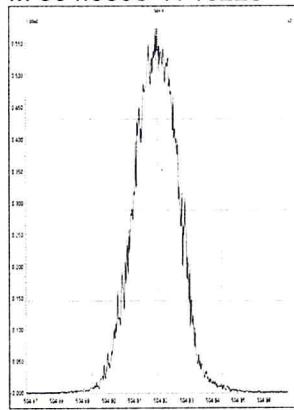
M 480.9696 R 13297



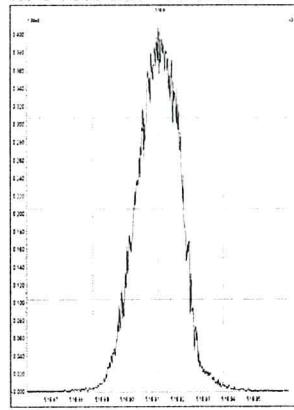
M 492.9696 R 13592



M 504.9696 R 13228



M 516.9697 R 12854



5DFA

WINDOW DEFINING MIX SUMMARY

CLIENT ID:

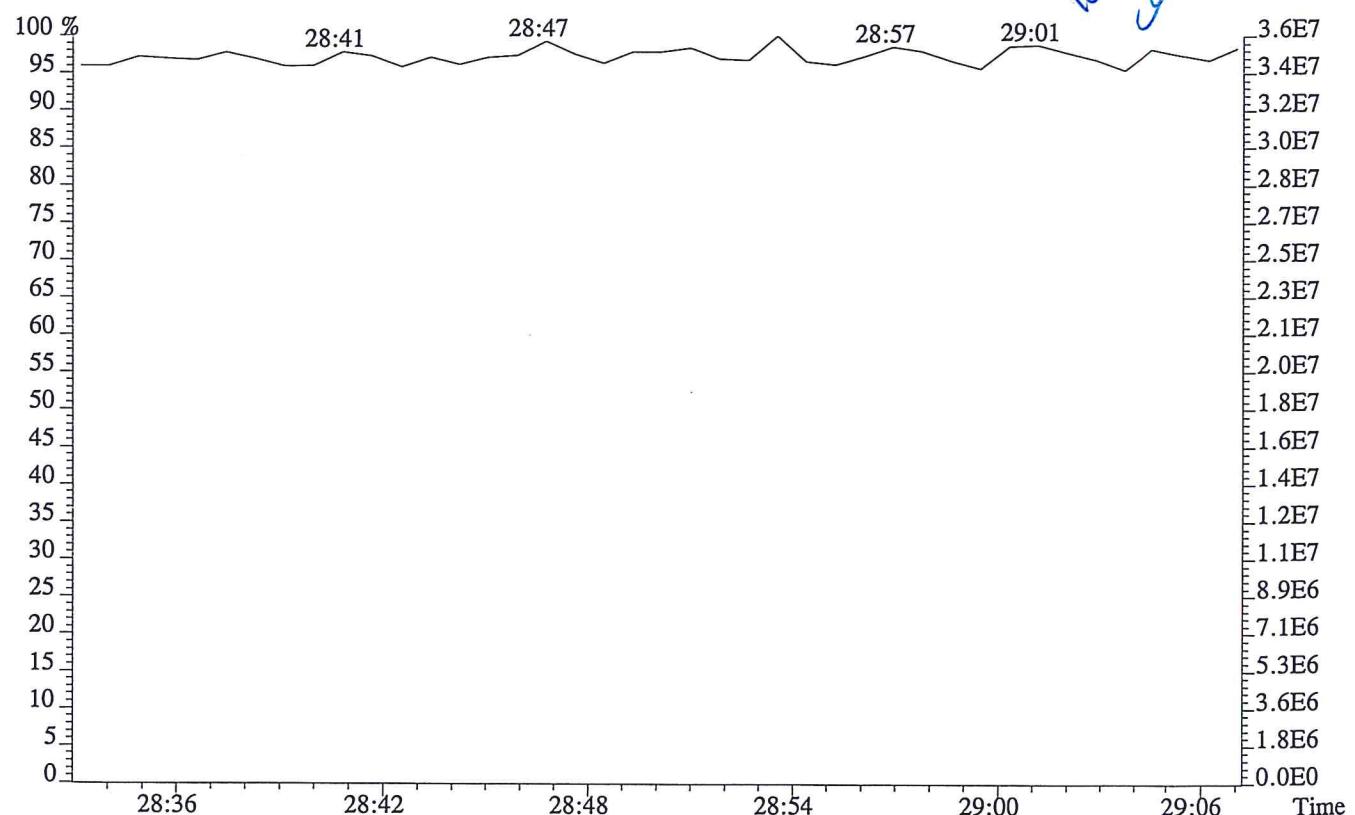
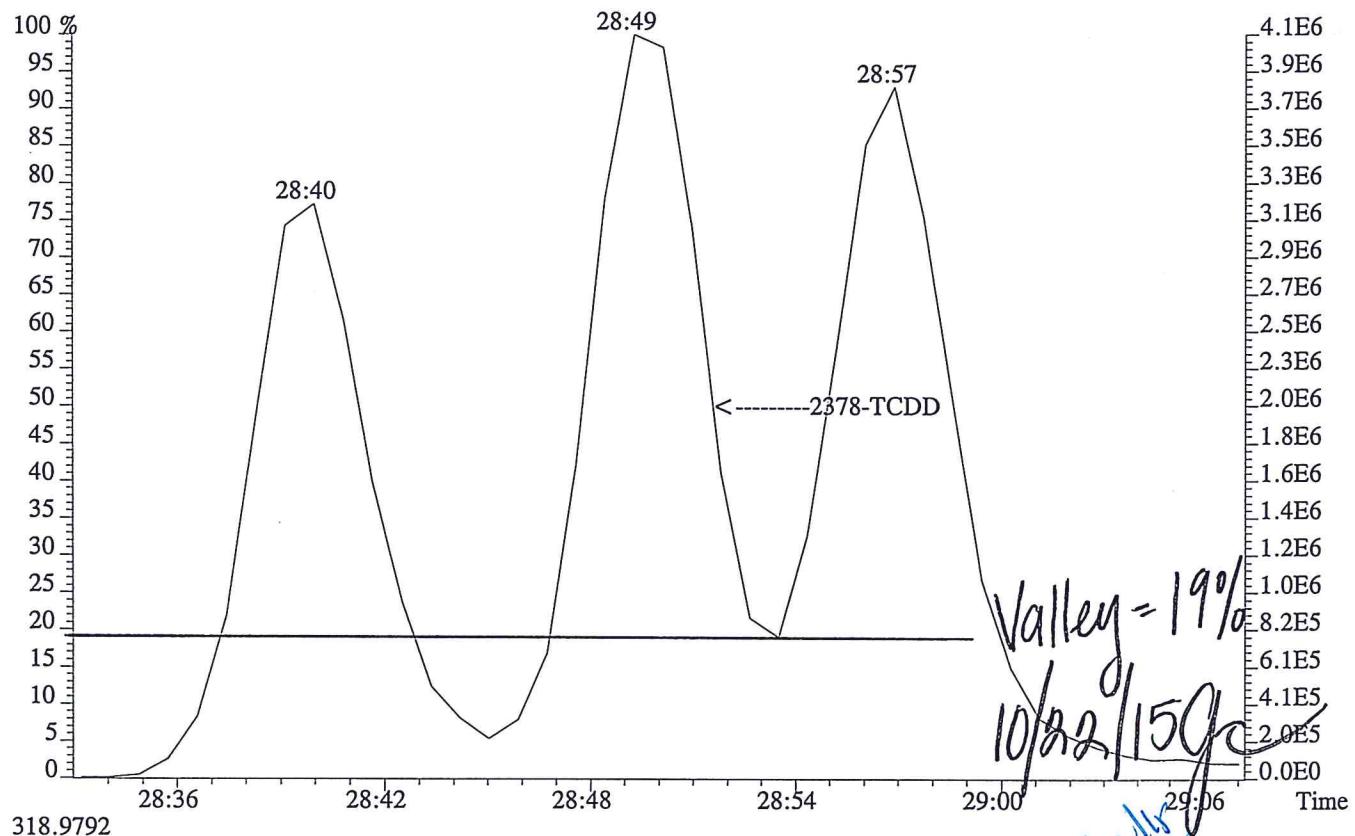
WDM

Lab Name: ALS Environmental  
Lab Code: ALSTX  
GC Column: DB-5MSUI      Case No.: \_\_\_\_\_ SDG No.:  
ID: 0.25 (mm)      Lab File ID: P600940  
Date Analyzed: 13-OCT-2015  
Time Analyzed: 13:17:56

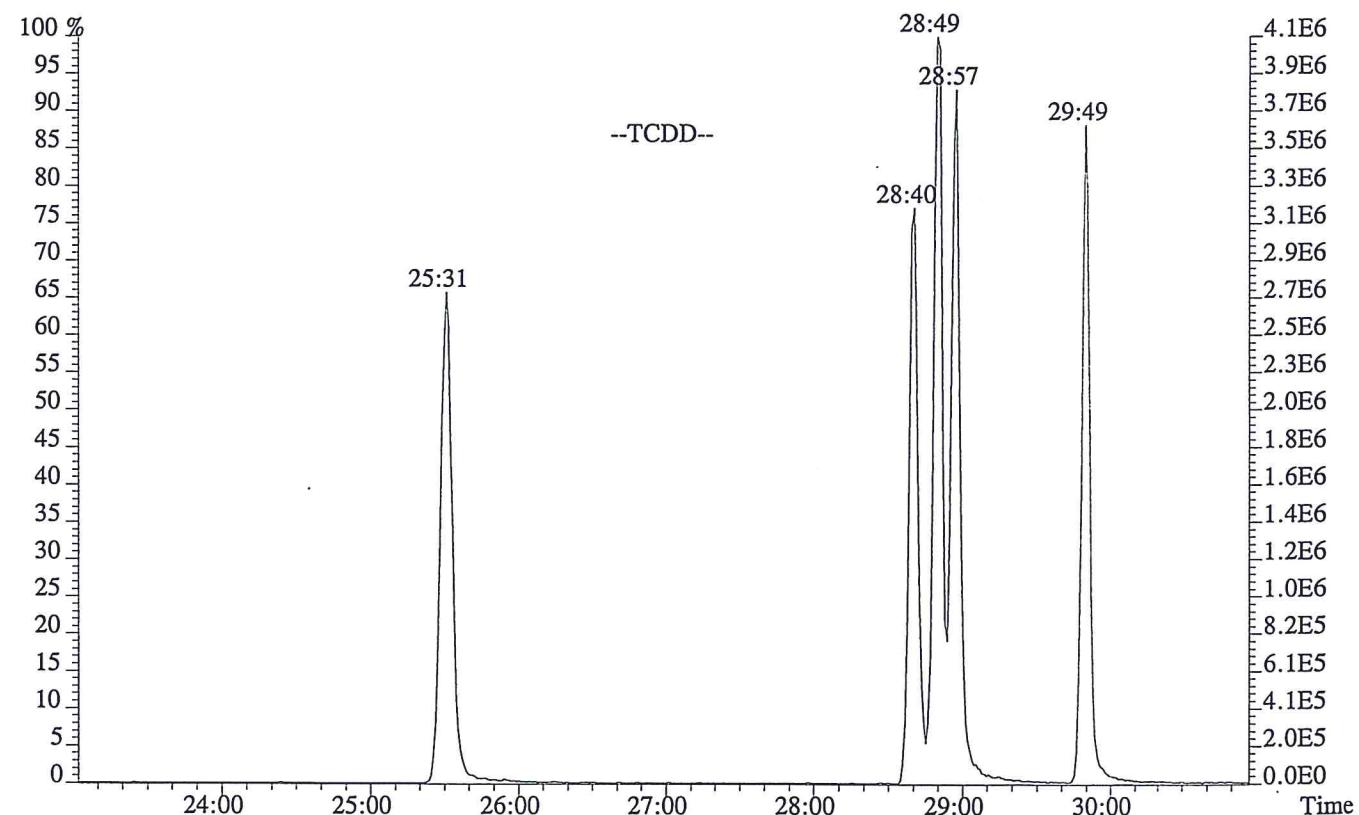
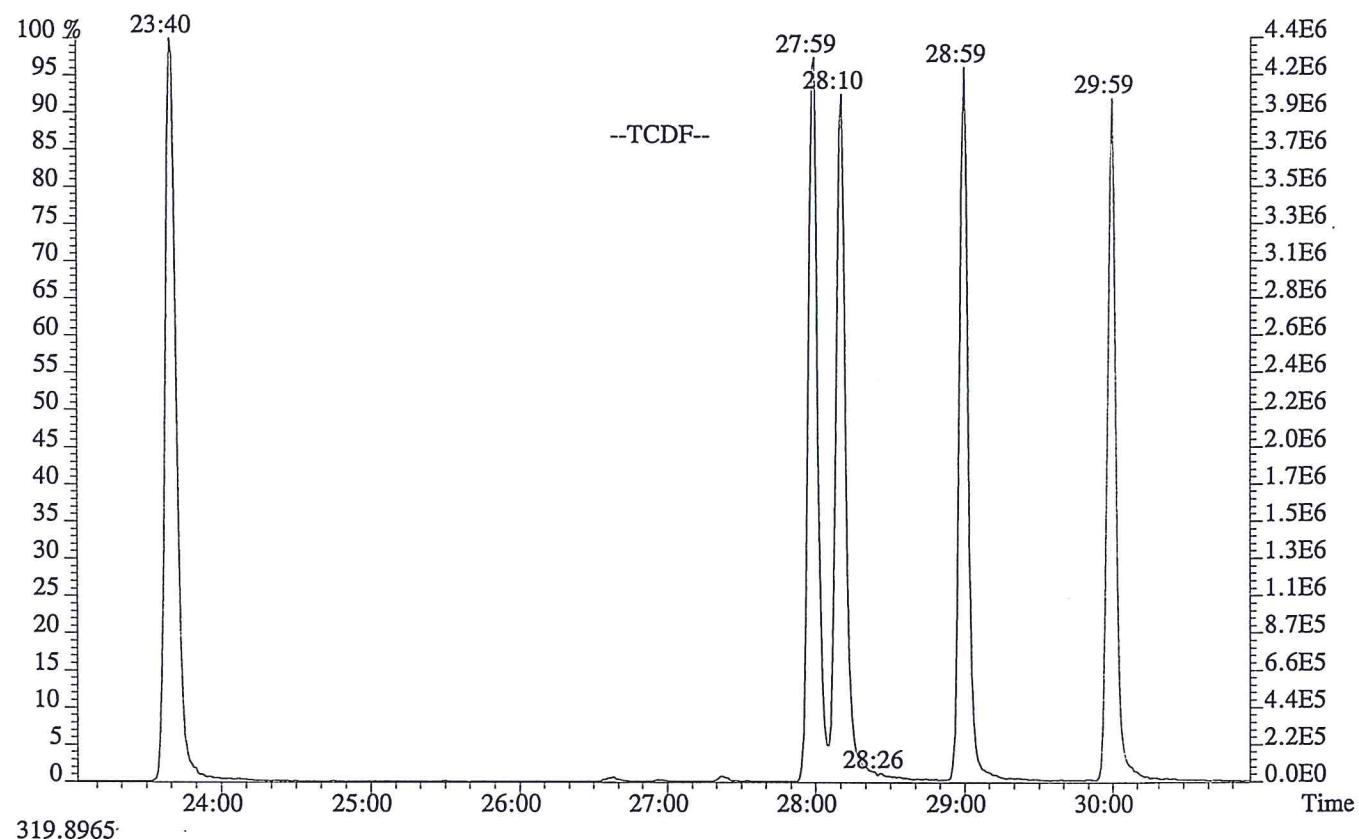
Congener	Retention Time First Eluting	Retention Time Last Eluting
TCDF	23:40	29:59
TCDD	25:31	29:49
PeCDF	29:56	34:11
PeCDD	31:28	33:55
HxCDF	34:50	37:19
HxCDD	35:20	36:55
HpCDF	38:32	39:55
HpCDD	38:47	39:27

% Valley 2378-TCDD: 19 %

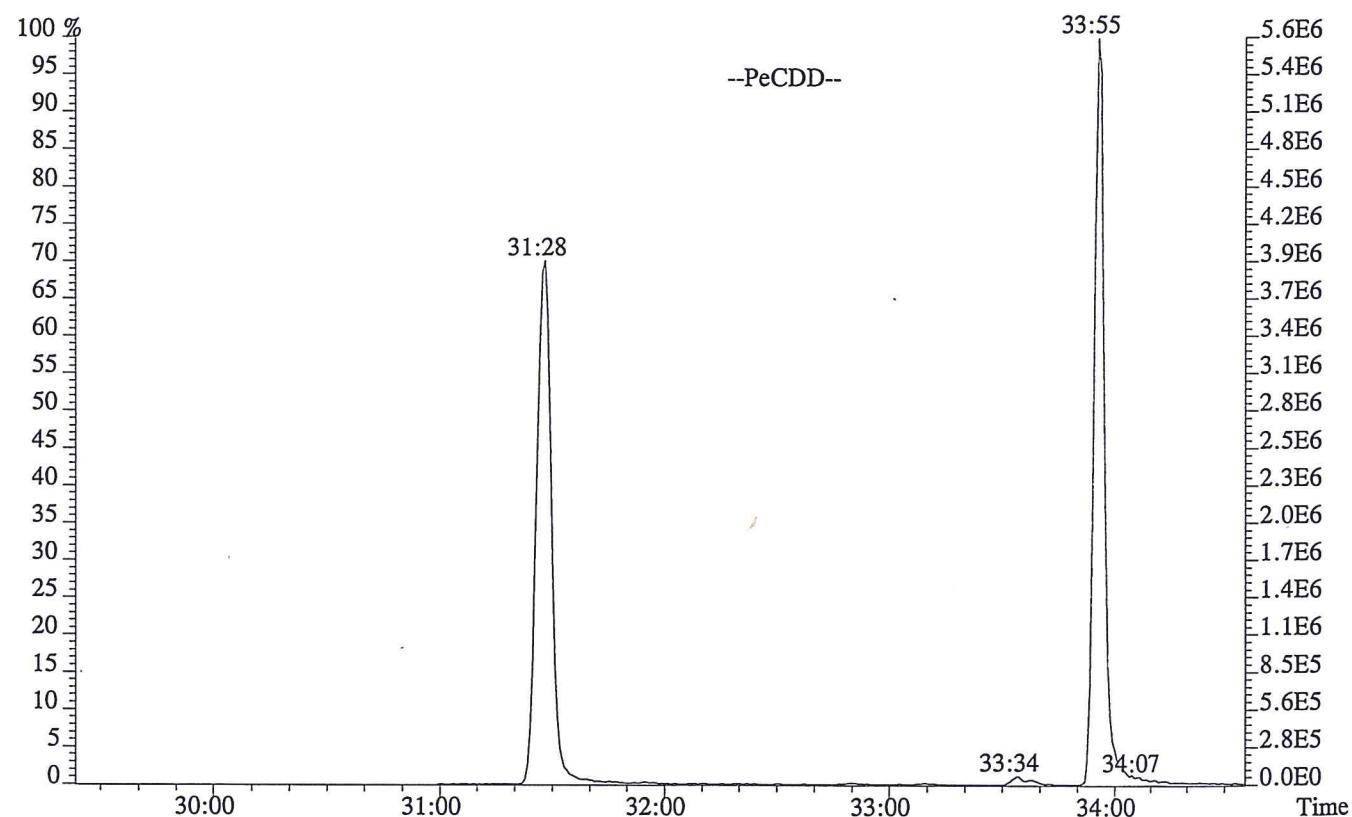
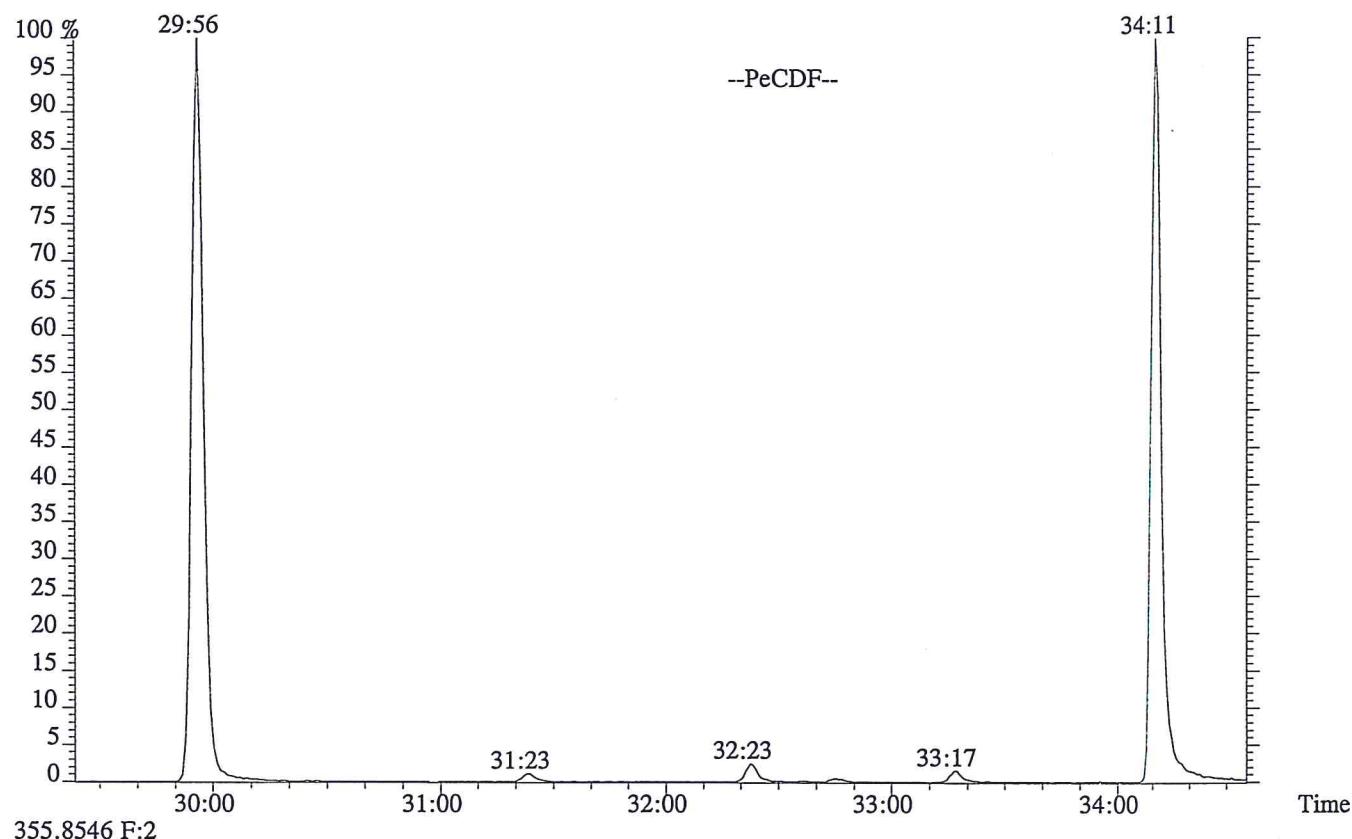
File:P600940 #1-562 Acq:13-OCT-2015 13:17:56 Probe EI+ Magnet SIR VG BioTech Mass spectf  
Sample#1 Exp:WD  
319.8965



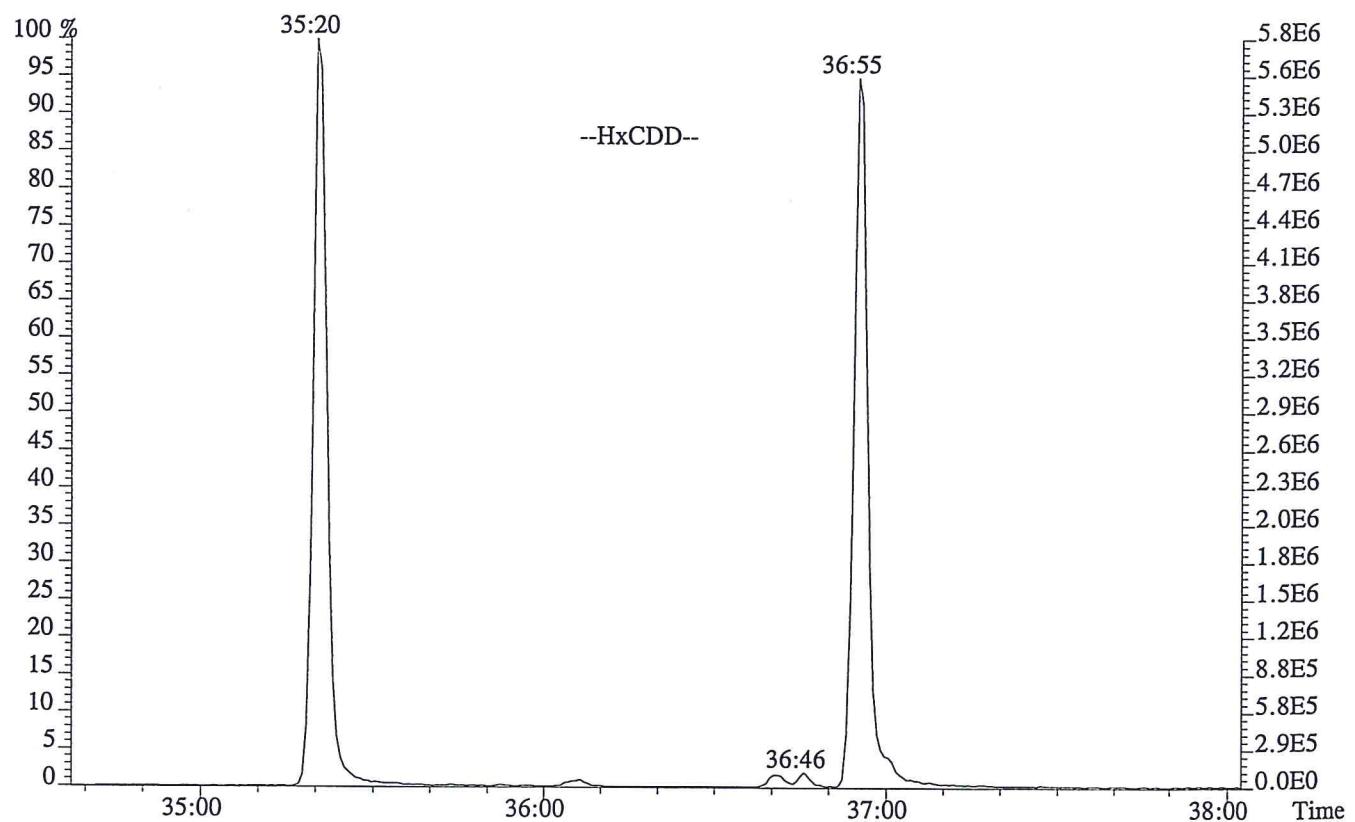
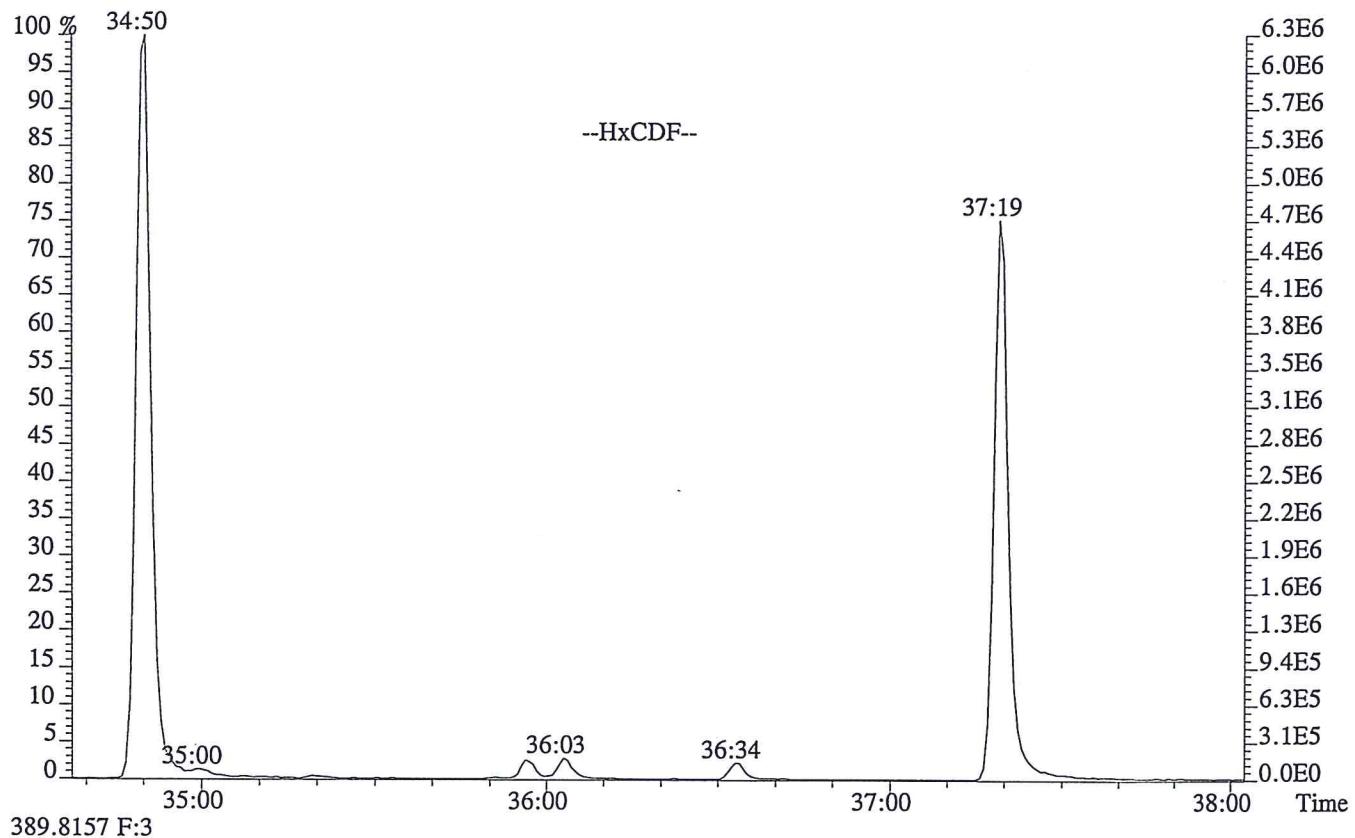
File:P600940 #1-562 Acq:13-OCT-2015 13:17:56 Probe EI+ Magnet SIR VG BioTech Mass spect&  
Sample#1 Exp:WD  
303.9016



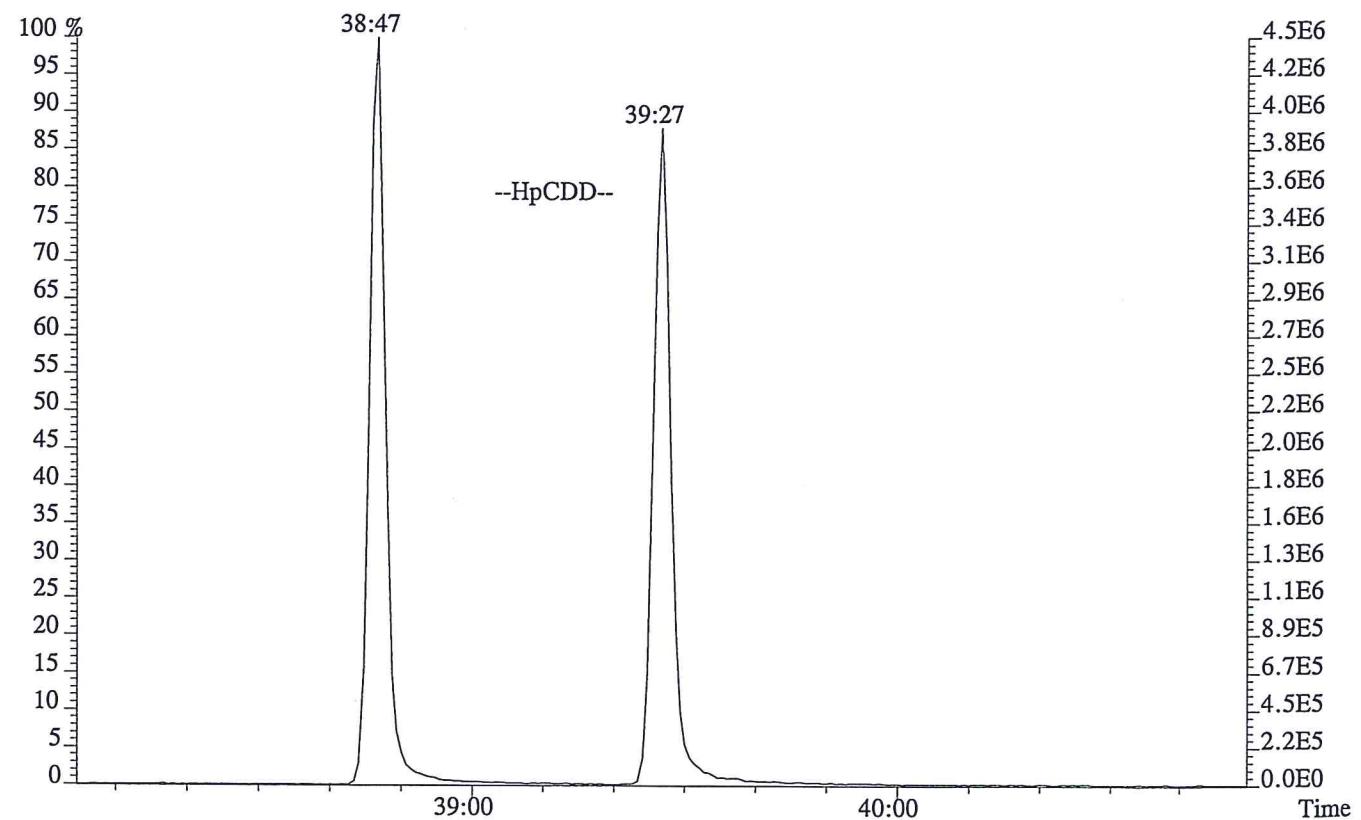
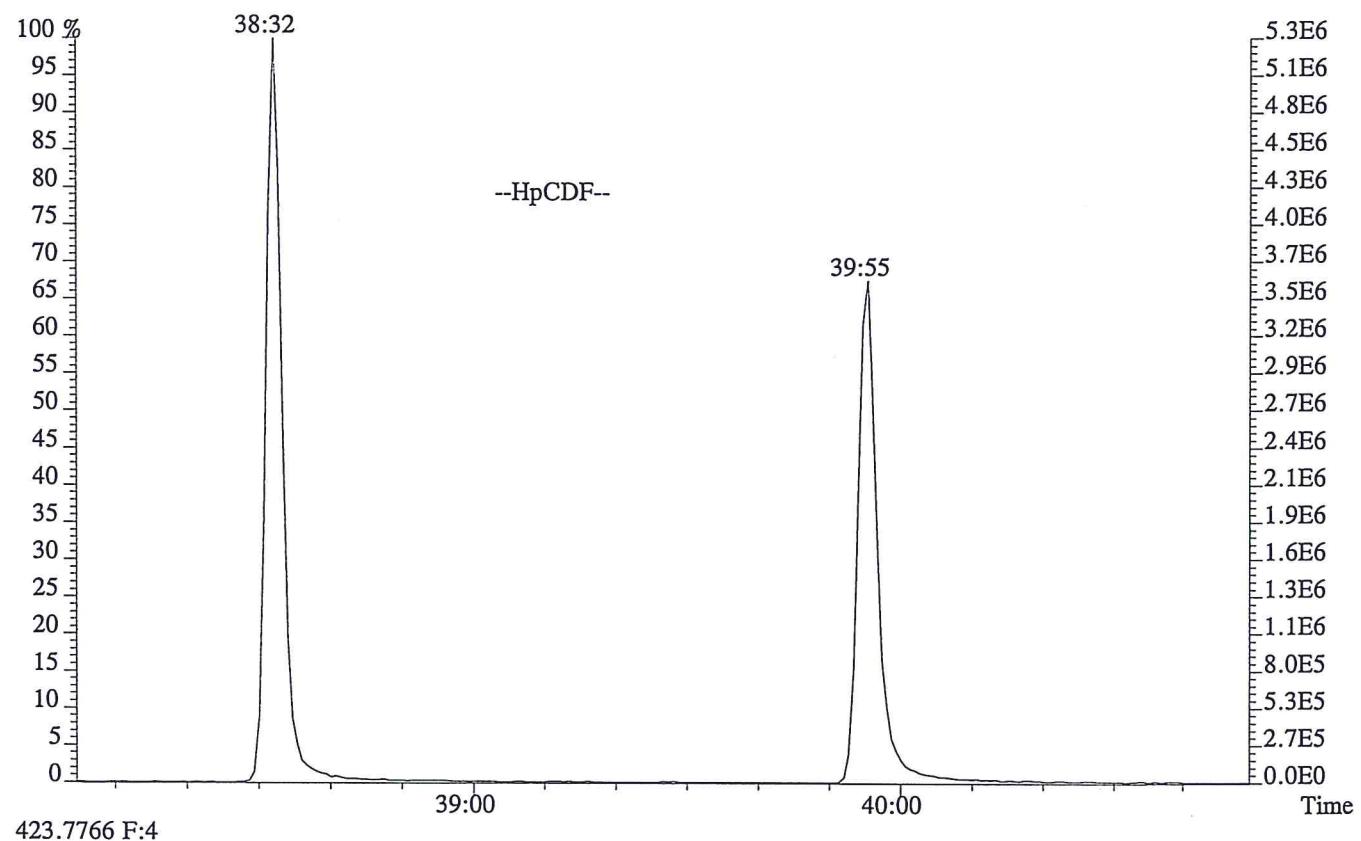
File:P600940 #1-562 Acq:13-OCT-2015 13:17:56 Probe EI+ Magnet SIR VG BioTech Mass spect&  
Sample#1 Exp:WD  
339.8597,339.8597 F:2



File:P600940 #1-308 Acq:13-OCT-2015 13:17:56 Probe EI+ Magnet SIR VG BioTech Mass spectf  
Sample#1 Exp:WD  
373.8208 F:3



File:P600940 #1-248 Acq:13-OCT-2015 13:17:56 Probe EI+ Magnet SIR VG BioTech Mass spectf  
Sample#1 Exp:WD  
407.7818 F:4



## USEPA - ITD

FORM 4A  
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: ALS ENVIRONMENTAL

Episode No.:

Contract No.:

SAS No.:

Initial Calibration Date: 08/19/15

Instrument ID: E-HRMS-08

GC Column ID: DB-5MSUI

VER Data Filename: P600939

Analysis Date: 13-OCT-15 Time: 12:29:16

	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	CONC. FOUND	CONC. RANGE (3) (ng/mL)	%RSD (4)
<b>NATIVE ANALYTES</b>						
2,3,7,8-TCDD	M/M+2	0.77	0.65-0.89	10.3	7.8 - 12.9	3.1
1,2,3,7,8-PeCDD	M+2/M+4	1.54	1.32-1.78	49	39 - 65	-1.1
1,2,3,4,7,8-HxCDD	M+2/M+4	1.24	1.05-1.43	49	39 - 64	-2.6
1,2,3,6,7,8-HxCDD	M+2/M+4	1.24	1.05-1.43	49	39 - 64	-2.0
1,2,3,7,8,9-HxCDD	M+2/M+4	1.24	1.05-1.43	47	41 - 61	-6.6
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.03	0.88-1.20	47	43 - 58	-6.7
OCDD	M+2/M+4	0.88	0.76-1.02	97	79 - 126	-3.5
2,3,7,8-TCDF	M/M+2	0.76	0.65-0.89	9.4	8.4 - 12.0	-5.8
1,2,3,7,8-PeCDF	M+2/M+4	1.54	1.32-1.78	48	41 - 60	-4.8
2,3,4,7,8-PeCDF	M+2/M+4	1.53	1.32-1.78	48	41 - 61	-4.4
1,2,3,4,7,8-HxCDF	M+2/M+4	1.23	1.05-1.43	47	45 - 56	-5.1
1,2,3,6,7,8-HxCDF	M+2/M+4	1.22	1.05-1.43	47	44 - 57	-6.6
1,2,3,7,8,9-HxCDF	M+2/M+4	1.23	1.05-1.43	46	45 - 56	-8.3
2,3,4,6,7,8-HxCDF	M+2/M+4	1.21	1.05-1.43	47	44 - 57	-6.0
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.02	0.88-1.20	46	45 - 55	-7.4
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.02	0.88-1.20	46	43 - 58	-7.5
OCDF	M+2/M+4	0.89	0.76-1.02	90	63 - 159	-9.7

(1) See Table 8, Method 1613B, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613B.

(3) Contract-required concentration range as specified in Table 6, Method 1613B, under VER.

(4) The beginning CCAL %RSD for the 17 unlabeled standard must not exceed +/- 20%, Section 7.7.4.1. The ending CCAL must not exceed +/-25%, Section 8.3.2.4, Method 8290

12/2012  
1613F4A.FRM

## USEPA - ITD

FORM 4B  
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: ALS ENVIRONMENTAL

Episode No.:

Contract No.:

SAS No.:

Initial Calibration Date: 08/19/15

Instrument ID: E-HRMS-08

GC Column ID: DB-5MSUI

VER Data Filename: P600939

Analysis Date: 13-OCT-15 Time: 12:29:16

LABELED COMPOUNDS	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	CONC. FOUND	CONC. RANGE (3) (ng/mL)	%RSD (5)
13C-2,3,7,8-TCDD	M/M+2	0.80	0.65-0.89	82	82 - 121	-17.8
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.58	1.32-1.78	98	62 - 160	-2.1
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.26	1.05-1.43	103	85 - 117	3.0
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.26	1.05-1.43	105	85 - 118	5.2
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.05	0.88-1.20	98	72 - 138	-2.2
13C-OCDD	M+2/M+4	0.90	0.76-1.02	218	96 - 415	9.0
13C-2,3,7,8-TCDF	M/M+2	0.78	0.65-0.89	97	71 - 140	-3.2
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.56	1.32-1.78	97	76 - 130	-3.1
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.57	1.32-1.78	95	77 - 130	-4.9
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.52	0.43-0.59	95	76 - 131	-5.2
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.52	0.43-0.59	98	70 - 143	-2.1
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.52	0.43-0.59	92	74 - 135	-8.1
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.52	0.43-0.59	95	73 - 137	-5.2
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.44	0.37-0.51	92	78 - 129	-7.6
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.44	0.37-0.51	77	77 - 129	-22.8

## CLEANUP STANDARD

37Cl-2,3,7,8-TCDD	8.4	7.8 - 12.7	-15.9
-------------------	-----	------------	-------

- (1) See Table 8, Method 1613B, for m/z specifications.
- (2) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613B.
- (3) Contract-required concentration range, as specified in Table 6, Method 1613B, under VER.
- (4) No ion abundance ratio; report concentration found.
- (5) The beginning CCAL %RSD for the labeled standard must not exceed +/- 30% Section 7.7.4.2. The ending CCAL must not exceed +/- 35%, Sec 8.3.2.4 (8290)

12/2012  
1613F4B.FRM

ALS ENVIRONMENTAL  
Sample Response Summary

CLIENT ID.  
84080

Run #7      Filename P600939      Samp: 1      Inj: 1      Acquired: 13-OCT-15 12:29:16  
Processed: 22-OCT-15 08:56:16      Sample ID: CS3

Typ	Name	RT-1	Resp 1	Resp 2	Ratio	Meet	Mod?	RRF
1 Unk	2,3,7,8-TCDF	28:10	3.811e+04	5.004e+04	0.76	yes	no	0.941
2 Unk	1,2,3,7,8-PeCDF	32:21	2.992e+05	1.948e+05	1.54	yes	no	0.987
3 Unk	2,3,4,7,8-PeCDF	33:15	2.802e+05	1.833e+05	1.53	yes	no	0.934
4 Unk	1,2,3,4,7,8-HxCDF	35:56	2.487e+05	2.028e+05	1.23	yes	no	1.189
5 Unk	1,2,3,6,7,8-HxCDF	36:02	2.574e+05	2.109e+05	1.22	yes	no	1.126
6 Unk	2,3,4,6,7,8-HxCDF	36:32	2.425e+05	1.997e+05	1.21	yes	no	1.116
7 Unk	1,2,3,7,8,9-HxCDF	37:17	2.166e+05	1.760e+05	1.23	yes	no	1.158
8 Unk	1,2,3,4,6,7,8-HpCDF	38:31	2.048e+05	2.011e+05	1.02	yes	no	1.373
9 Unk	1,2,3,4,7,8,9-HpCDF	39:54	1.668e+05	1.631e+05	1.02	yes	no	1.287
10 Unk	OCDF	42:22	2.943e+05	3.291e+05	0.89	yes	no	1.257
11 Unk	2,3,7,8-TCDD	28:56	3.312e+04	4.300e+04	0.77	yes	no	1.010
12 Unk	1,2,3,7,8-PeCDD	33:32	2.228e+05	1.451e+05	1.54	yes	no	0.932
13 Unk	1,2,3,4,7,8-HxCDD	36:40	2.024e+05	1.635e+05	1.24	yes	no	1.026
14 Unk	1,2,3,6,7,8-HxCDD	36:45	1.968e+05	1.586e+05	1.24	yes	no	1.021
15 Unk	1,2,3,7,8,9-HxCDD	36:59	2.114e+05	1.706e+05	1.24	yes	no	1.133
16 Unk	1,2,3,4,6,7,8-HpCDD	39:26	1.674e+05	1.632e+05	1.03	yes	no	1.034
17 Unk	OCDD	42:10	2.760e+05	3.131e+05	0.88	yes	no	1.111
18 IS	13C-2,3,7,8-TCDF	28:08	4.365e+05	5.588e+05	0.78	yes	no	1.379
19 IS	13C-1,2,3,7,8-PeCDF	32:21	6.408e+05	4.099e+05	1.56	yes	no	1.456
20 IS	13C-2,3,4,7,8-PeCDF	33:15	6.335e+05	4.043e+05	1.57	yes	no	1.465
21 IS	13C-1,2,3,4,7,8-HxCDF	35:55	2.721e+05	5.283e+05	0.52	yes	no	1.075
22 IS	13C-1,2,3,6,7,8-HxCDF	36:01	3.042e+05	5.859e+05	0.52	yes	no	1.158
23 IS	13C-2,3,4,6,7,8-HxCDF	36:31	2.882e+05	5.554e+05	0.52	yes	no	1.133
24 IS	13C-1,2,3,7,8,9-HxCDF	37:16	2.518e+05	4.874e+05	0.52	yes	no	1.024
25 IS	13C-1,2,3,4,6,7,8-HpCDF	38:31	1.963e+05	4.423e+05	0.44	yes	no	0.880
26 IS	13C-1,2,3,4,7,8,9-HpCDF	39:53	1.695e+05	3.851e+05	0.44	yes	no	0.914
27 IS	13C-2,3,7,8-TCDD	28:55	3.238e+05	4.071e+05	0.80	yes	no	1.193
28 IS	13C-1,2,3,7,8-PeCDD	33:31	4.891e+05	3.090e+05	1.58	yes	no	1.094
29 IS	13C-1,2,3,4,7,8-HxCDD	36:39	4.082e+05	3.247e+05	1.26	yes	no	0.906
30 IS	13C-1,2,3,6,7,8-HxCDD	36:44	3.961e+05	3.144e+05	1.26	yes	no	0.860
31 IS	13C-1,2,3,4,6,7,8-HpCDD	39:25	3.506e+05	3.350e+05	1.05	yes	no	0.892
32 IS	13C-OCDD	42:10	5.196e+05	5.797e+05	0.90	yes	no	0.642
33 RS/RT	13C-1,2,3,4-TCDD	28:21	3.310e+05	4.143e+05	0.80	yes	no	-
34 RS/RT	13C-1,2,3,7,8,9-HxCDD	36:58	4.385e+05	3.470e+05	1.26	yes	no	-
35 C/Up	37Cl-2,3,7,8-TCDD	28:56	7.921e+04				no	1.263

---

ALS ENVIRONMENTAL  
10450 Stancliff Rd, Suite 115  
Houston, TX 77099  
Office (713) 266-1599. Fax (713) 266-0130

www.alsglobal.com

ALS ENVIRONMENTAL  
Signal/Noise Height Ratio Summary

CLIENT ID.  
84080

Run #7   Filename P600939              Samp: 1    Inj: 1              Acquired: 13-OCT-15 12:29:16  
Processed: 22-OCT-15 08:56:16              LAB. ID: CS3

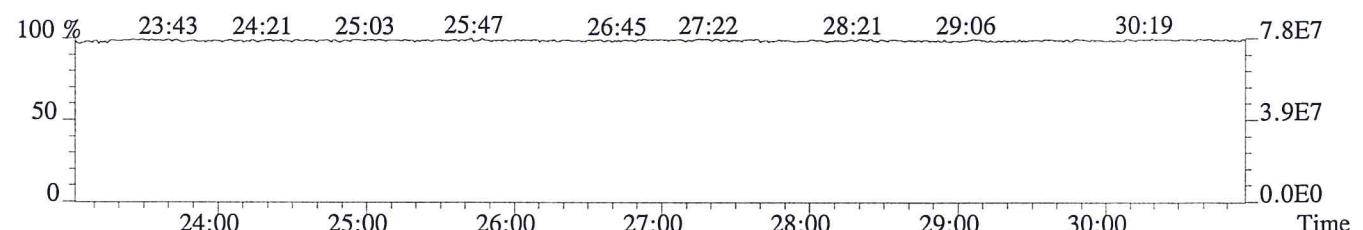
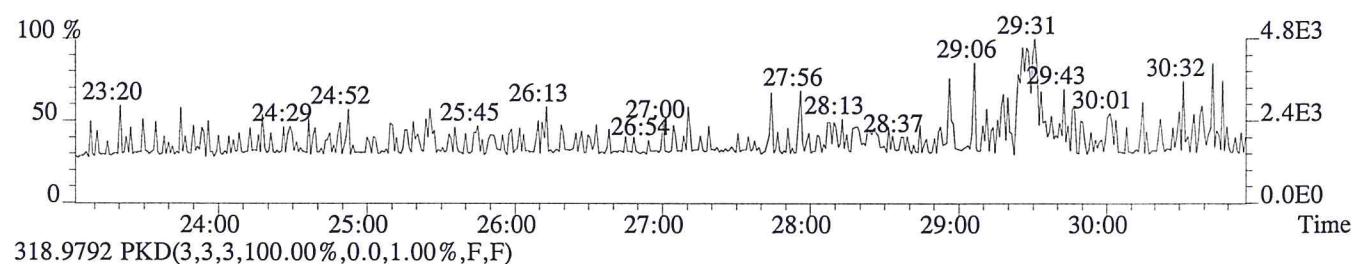
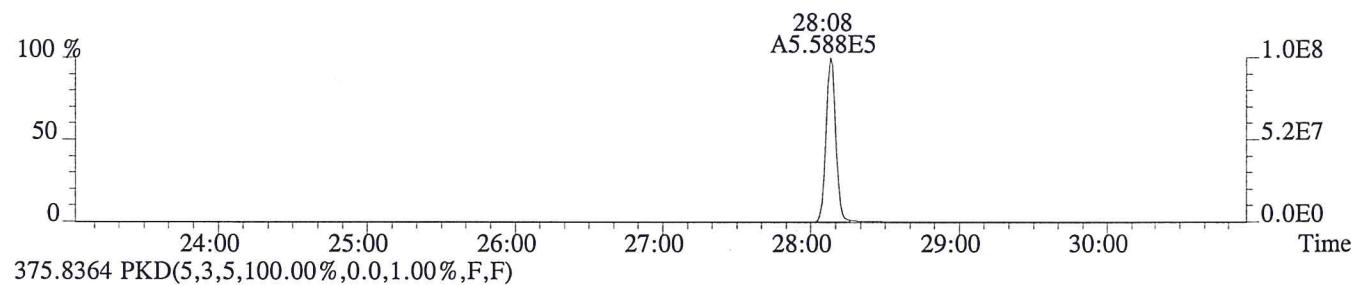
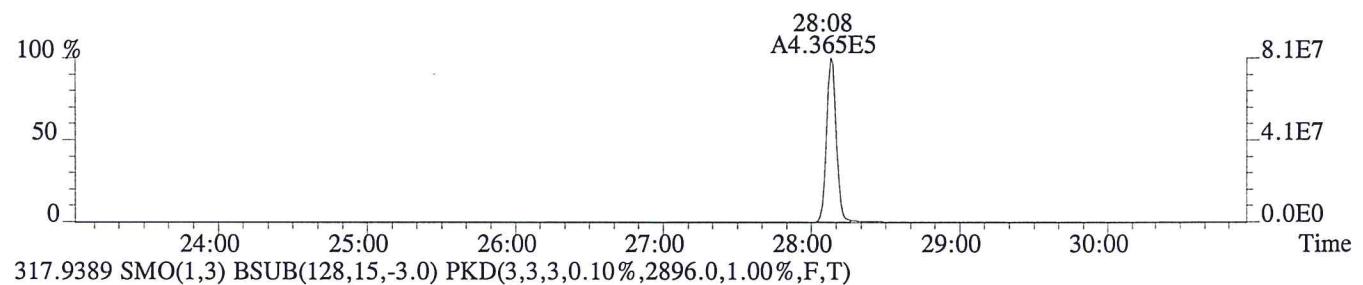
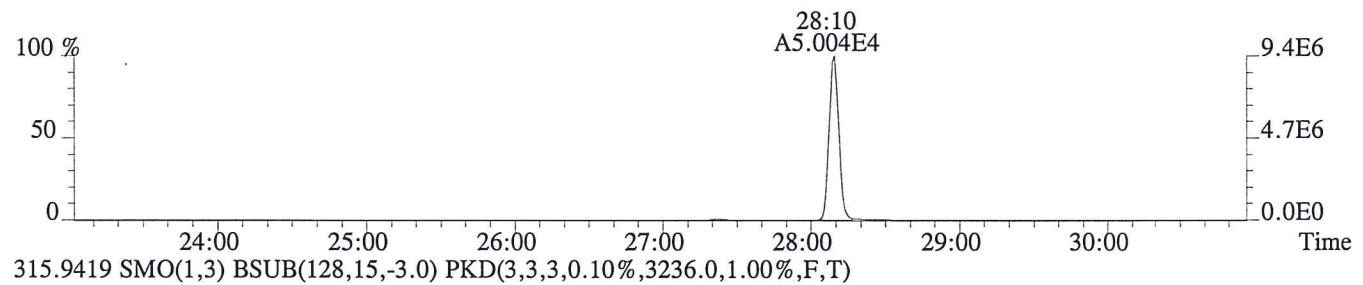
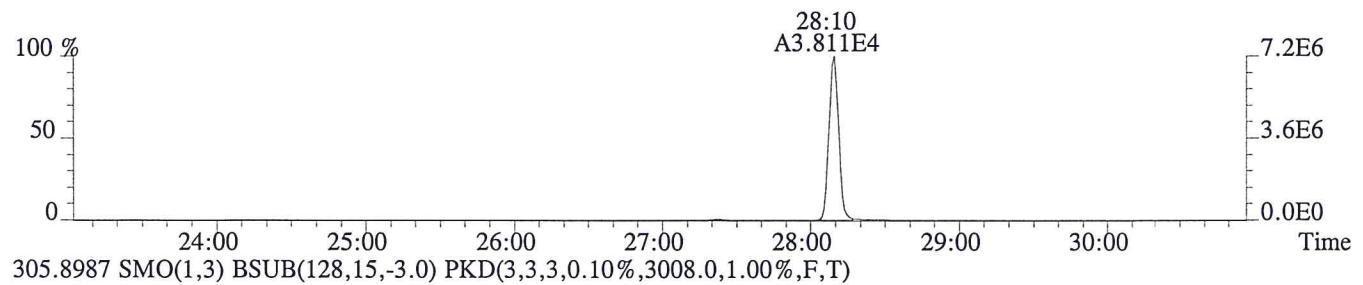
	Name	Signal 1	Noise 1	S/N Rat.1	Signal 2	Noise 2	S/N Rat.2
1	2,3,7,8-TCDF	7.15e+06	1.06e+03	6.8e+03	9.38e+06	3.01e+03	3.1e+03
2	1,2,3,7,8-PeCDF	5.81e+07	1.21e+03	4.8e+04	3.78e+07	2.52e+03	1.5e+04
3	2,3,4,7,8-PeCDF	5.67e+07	1.21e+03	4.7e+04	3.71e+07	2.52e+03	1.5e+04
4	1,2,3,4,7,8-HxCDF	5.62e+07	1.34e+03	4.2e+04	4.55e+07	1.30e+03	3.5e+04
5	1,2,3,6,7,8-HxCDF	5.56e+07	1.34e+03	4.1e+04	4.59e+07	1.30e+03	3.5e+04
6	2,3,4,6,7,8-HxCDF	5.38e+07	1.34e+03	4.0e+04	4.48e+07	1.30e+03	3.5e+04
7	1,2,3,7,8,9-HxCDF	4.77e+07	1.34e+03	3.5e+04	3.85e+07	1.30e+03	3.0e+04
8	1,2,3,4,6,7,8-HpCDF	4.73e+07	3.58e+03	1.3e+04	4.65e+07	9.21e+03	5.0e+03
9	1,2,3,4,7,8,9-HpCDF	3.51e+07	3.58e+03	9.8e+03	3.46e+07	9.21e+03	3.8e+03
10	OCDF	5.53e+07	1.20e+03	4.6e+04	6.20e+07	1.73e+03	3.6e+04
11	2,3,7,8-TCDD	6.56e+06	1.57e+03	4.2e+03	8.51e+06	2.03e+03	4.2e+03
12	1,2,3,7,8-PeCDD	4.49e+07	2.92e+03	1.5e+04	2.95e+07	1.55e+03	1.9e+04
13	1,2,3,4,7,8-HxCDD	4.72e+07	3.04e+03	1.6e+04	3.80e+07	2.32e+03	1.6e+04
14	1,2,3,6,7,8-HxCDD	4.37e+07	3.04e+03	1.4e+04	3.53e+07	2.32e+03	1.5e+04
15	1,2,3,7,8,9-HxCDD	4.90e+07	3.04e+03	1.6e+04	3.94e+07	2.32e+03	1.7e+04
16	1,2,3,4,6,7,8-HpCDD	3.68e+07	1.94e+03	1.9e+04	3.53e+07	2.54e+03	1.4e+04
17	OCDD	5.35e+07	1.40e+03	3.8e+04	6.05e+07	1.69e+03	3.6e+04
18	13C-2,3,7,8-TCDF	8.13e+07	3.24e+03	2.5e+04	1.04e+08	2.90e+03	3.6e+04
19	13C-1,2,3,7,8-PeCDF	1.23e+08	3.07e+03	4.0e+04	7.81e+07	2.20e+03	3.5e+04
20	13C-2,3,4,7,8-PeCDF	1.31e+08	3.07e+03	4.3e+04	8.38e+07	2.20e+03	3.8e+04
21	13C-1,2,3,4,7,8-HxCDF	6.10e+07	2.40e+03	2.5e+04	1.17e+08	3.22e+03	3.6e+04
22	13C-1,2,3,6,7,8-HxCDF	6.59e+07	2.40e+03	2.7e+04	1.28e+08	3.22e+03	4.0e+04
23	13C-2,3,4,6,7,8-HxCDF	6.37e+07	2.40e+03	2.7e+04	1.24e+08	3.22e+03	3.9e+04
24	13C-1,2,3,7,8,9-HxCDF	5.58e+07	2.40e+03	2.3e+04	1.07e+08	3.22e+03	3.3e+04
25	13C-1,2,3,4,6,7,8-HpCDF	4.55e+07	6.37e+03	7.1e+03	1.02e+08	4.64e+03	2.2e+04
26	13C-1,2,3,4,7,8,9-HpCDF	3.52e+07	6.37e+03	5.5e+03	8.08e+07	4.64e+03	1.7e+04
27	13C-2,3,7,8-TCDD	6.34e+07	5.88e+03	1.1e+04	7.96e+07	3.63e+03	2.2e+04
28	13C-1,2,3,7,8-PeCDD	1.01e+08	1.78e+03	5.7e+04	6.39e+07	9.04e+02	7.1e+04
29	13C-1,2,3,4,7,8-HxCDD	9.47e+07	5.74e+03	1.6e+04	7.51e+07	3.44e+03	2.2e+04
30	13C-1,2,3,6,7,8-HxCDD	8.76e+07	5.74e+03	1.5e+04	7.04e+07	3.44e+03	2.0e+04
31	13C-1,2,3,4,6,7,8-HpCDD	7.63e+07	2.26e+03	3.4e+04	7.22e+07	3.01e+03	2.4e+04
32	13C-OCDD	1.01e+08	2.76e+03	3.7e+04	1.13e+08	2.28e+03	5.0e+04
33	13C-1,2,3,4-TCDD	6.41e+07	5.88e+03	1.1e+04	8.00e+07	3.63e+03	2.2e+04
34	13C-1,2,3,7,8,9-HxCDD	1.02e+08	5.74e+03	1.8e+04	8.05e+07	3.44e+03	2.3e+04
35	37Cl-2,3,7,8-TCDD	1.57e+07	2.89e+03	5.4e+03			

---

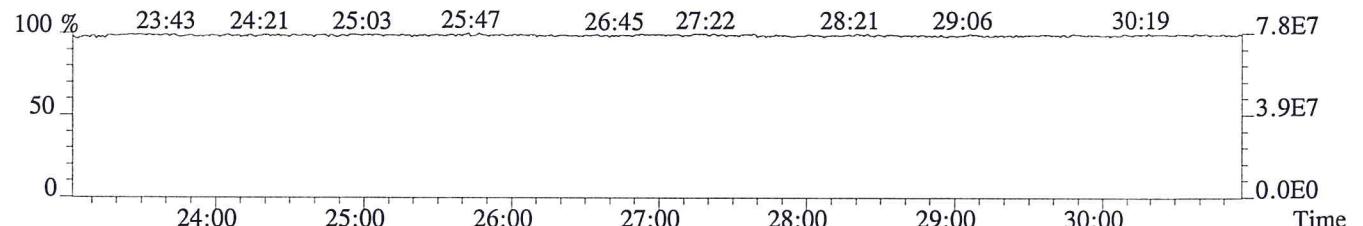
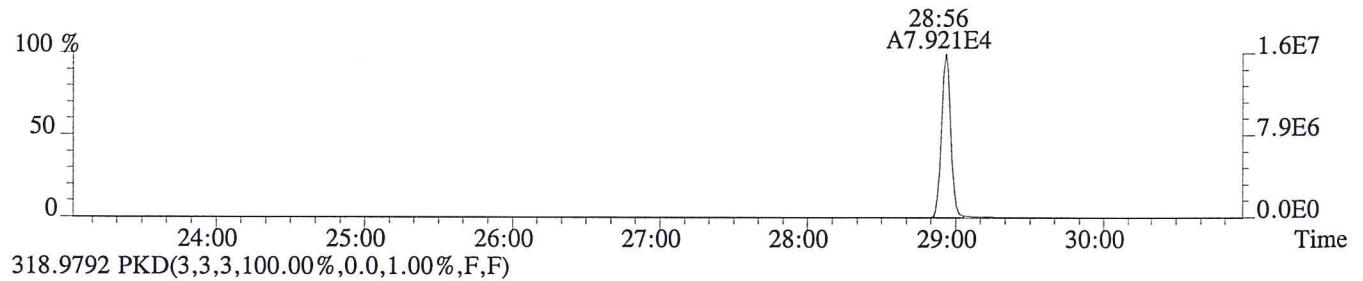
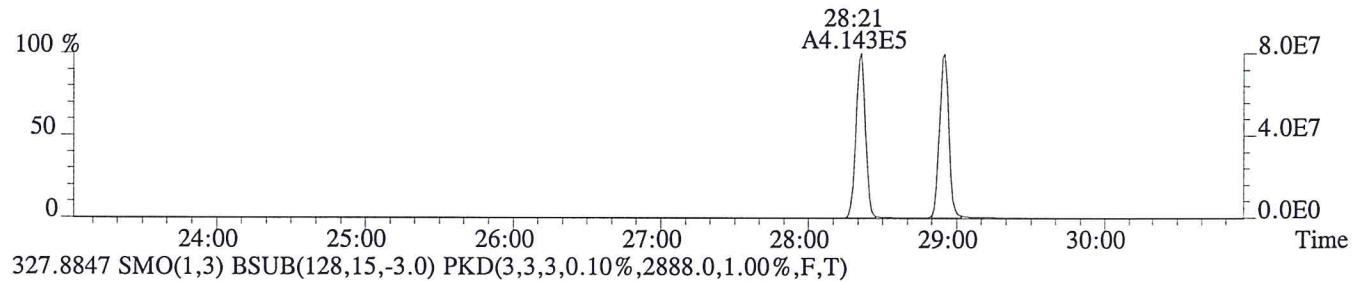
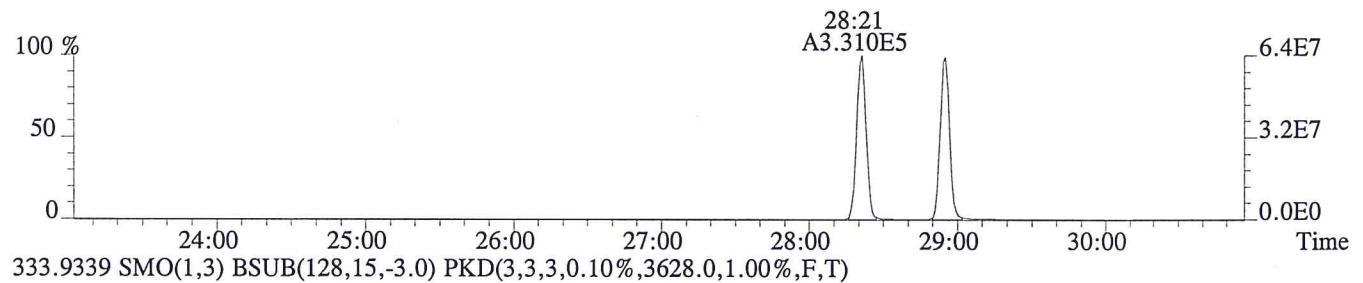
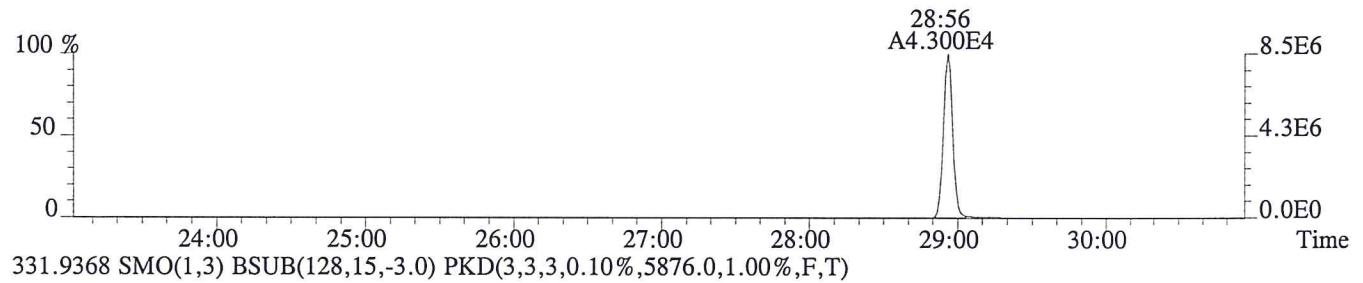
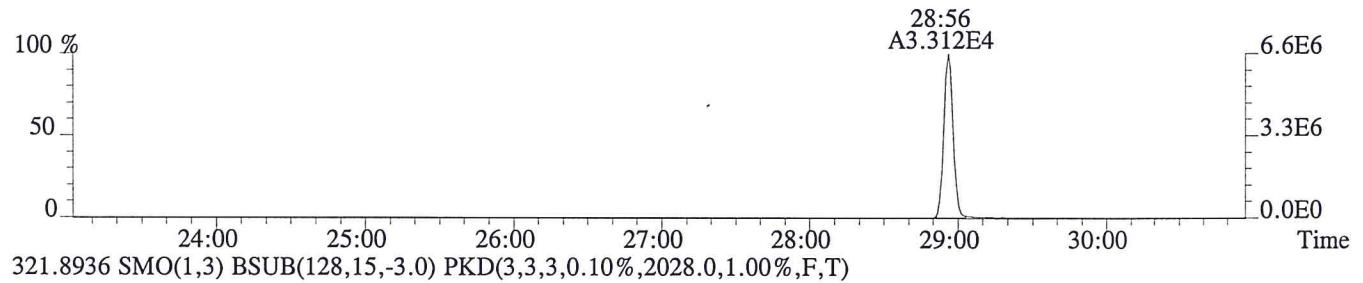
ALS ENVIRONMENTAL  
10450 Stancliff Rd., Suite 115  
Houston, TX 77099  
Office: (713) 266-1599. Fax: (713) 266-0130

www.alsglobal.com

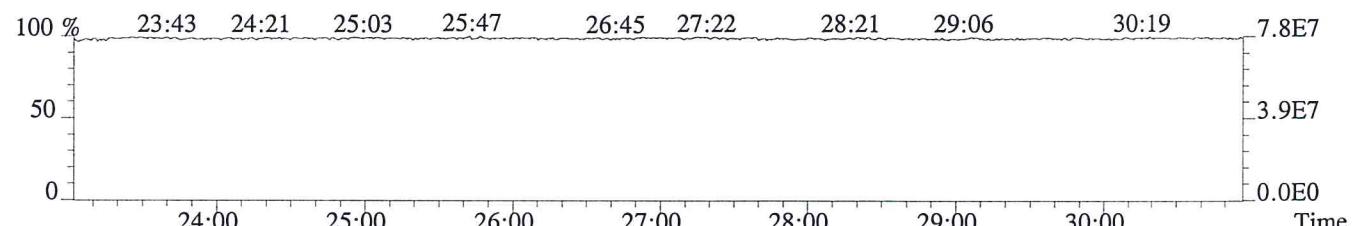
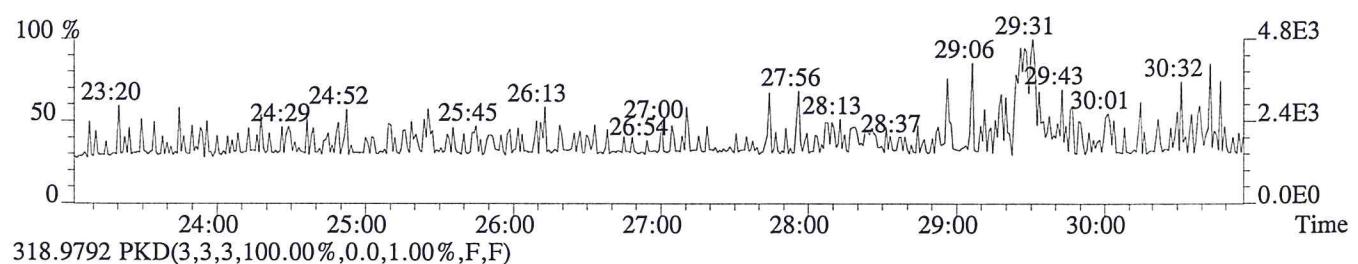
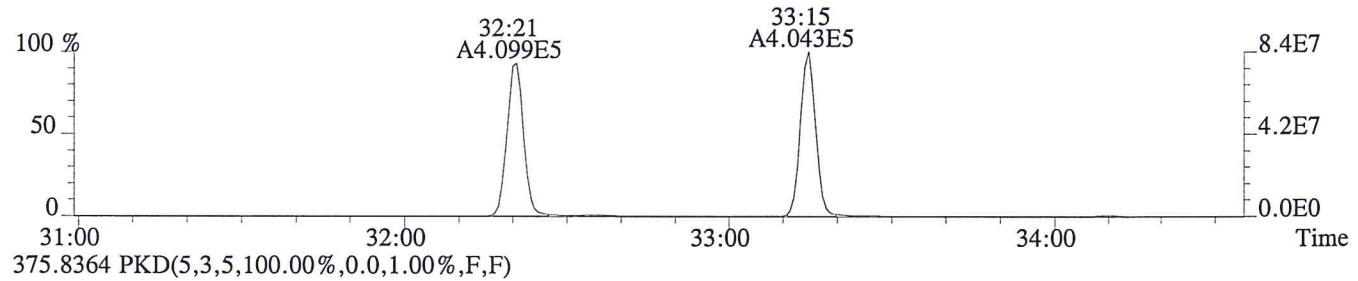
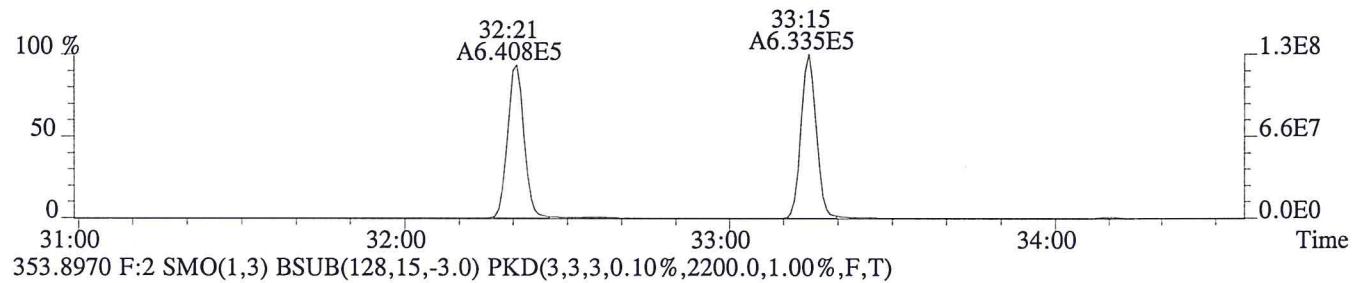
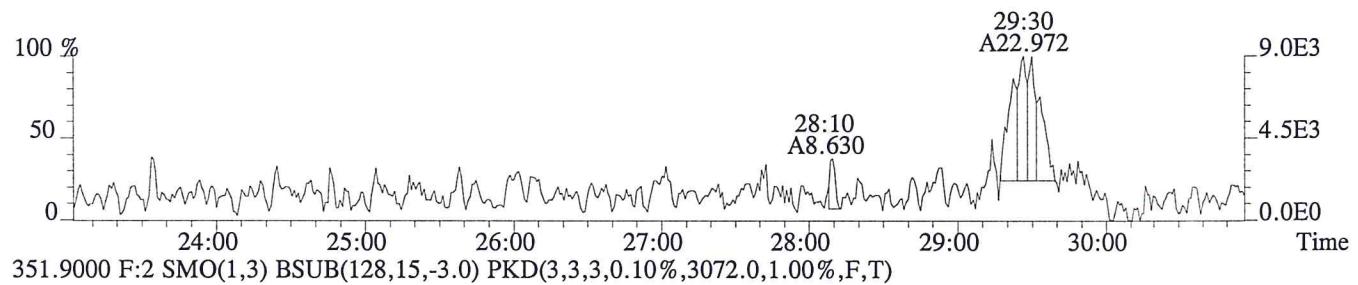
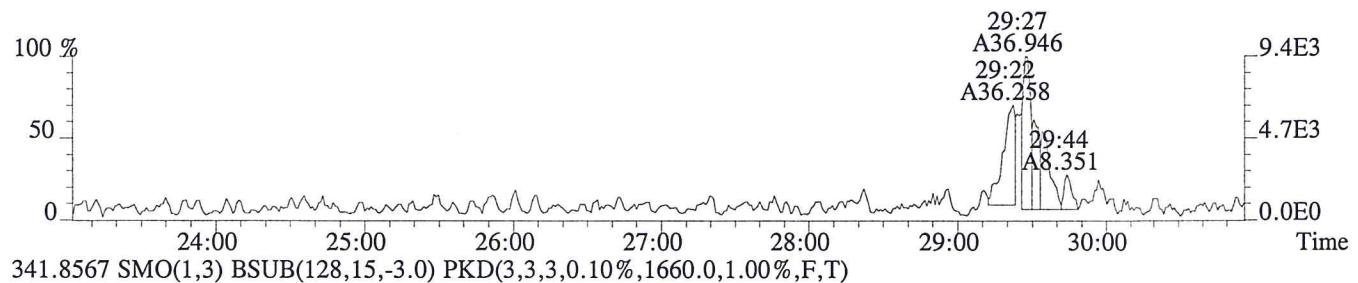
File:P600939 #1-562 Acq:13-OCT-2015 12:29:16 Probe EI+ Magnet SIR VG BioTech Mass spectr  
 Sample#1 Exp:CS3  
 303.9016 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1056.0,1.00%,F,T)



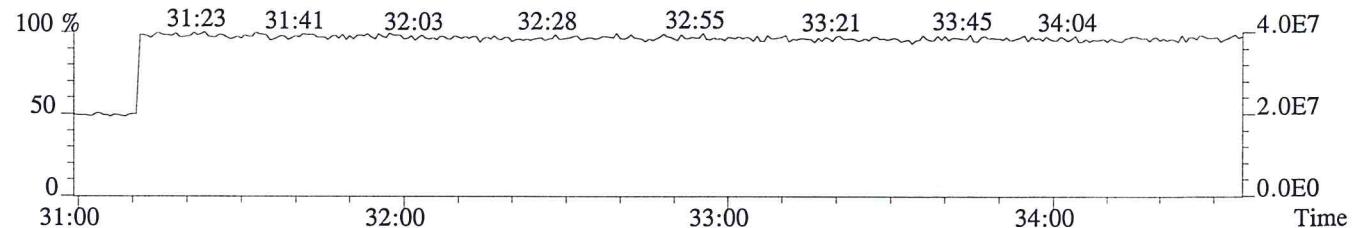
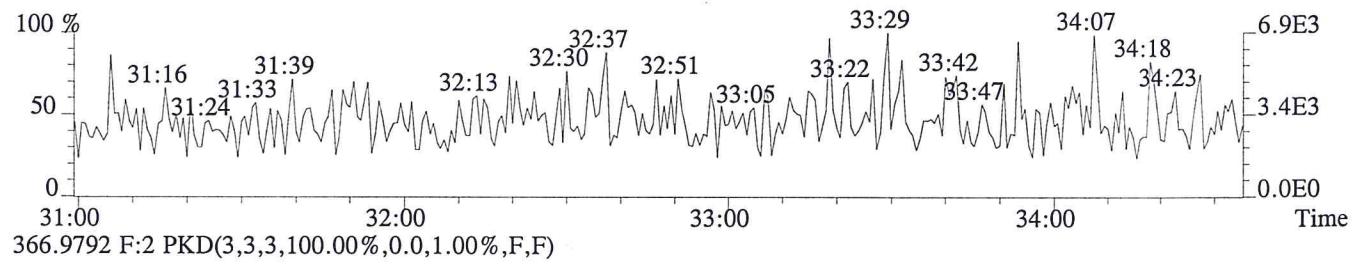
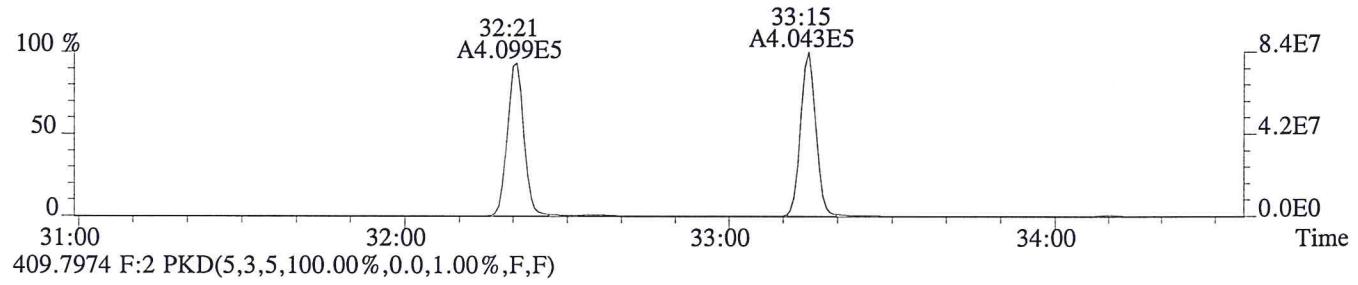
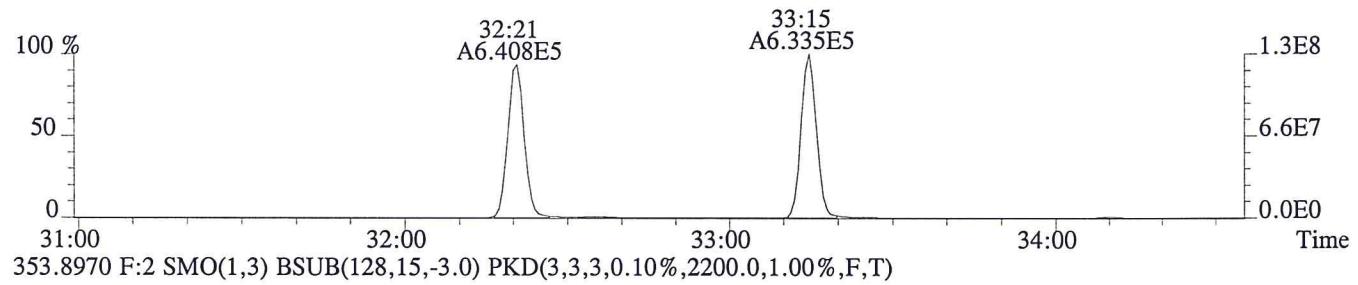
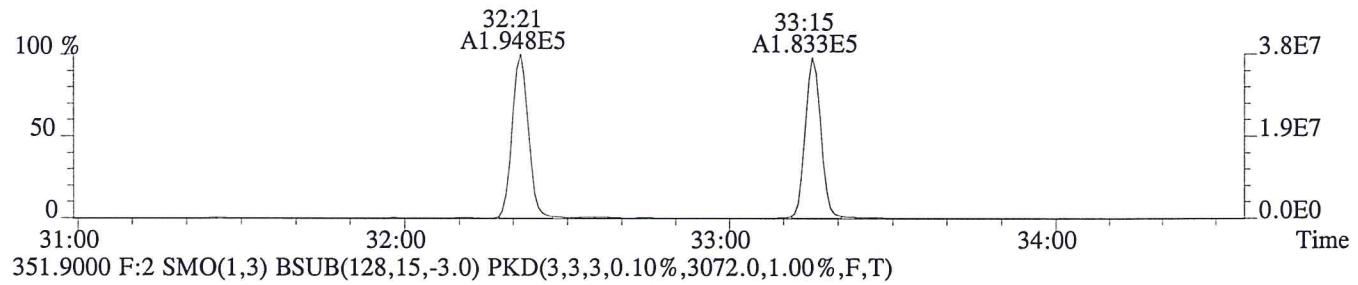
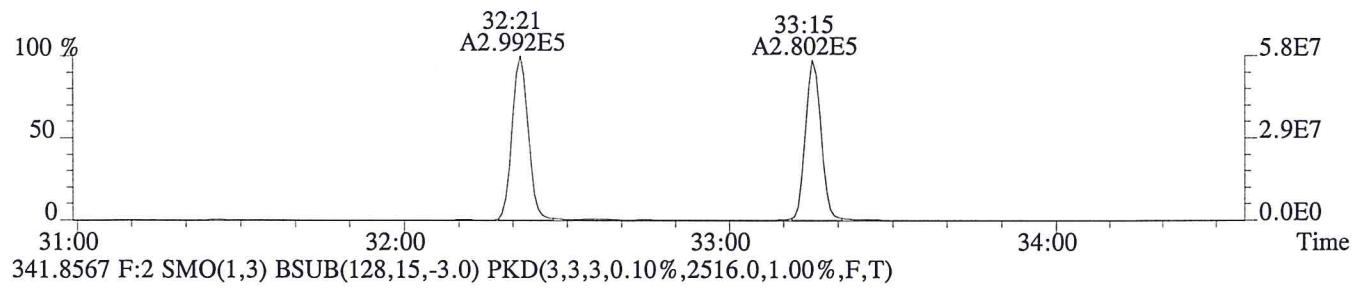
File:P600939 #1-562 Acq:13-OCT-2015 12:29:16 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:CS3  
 319.8965 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1572.0,1.00%,F,T)



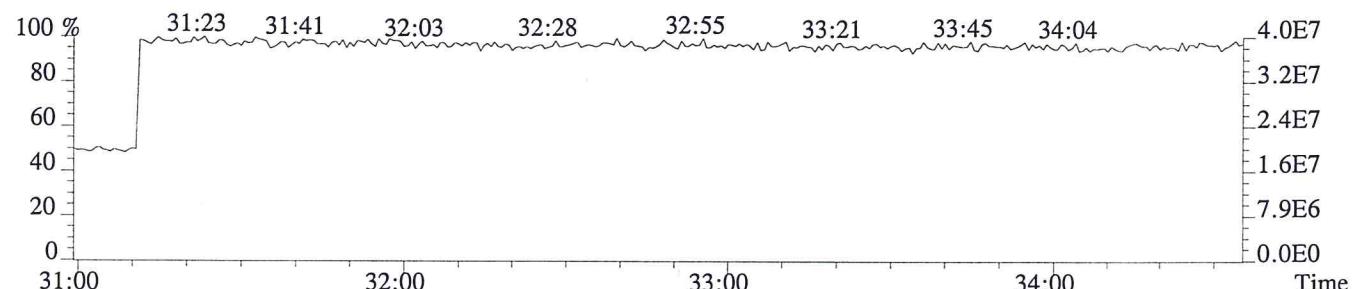
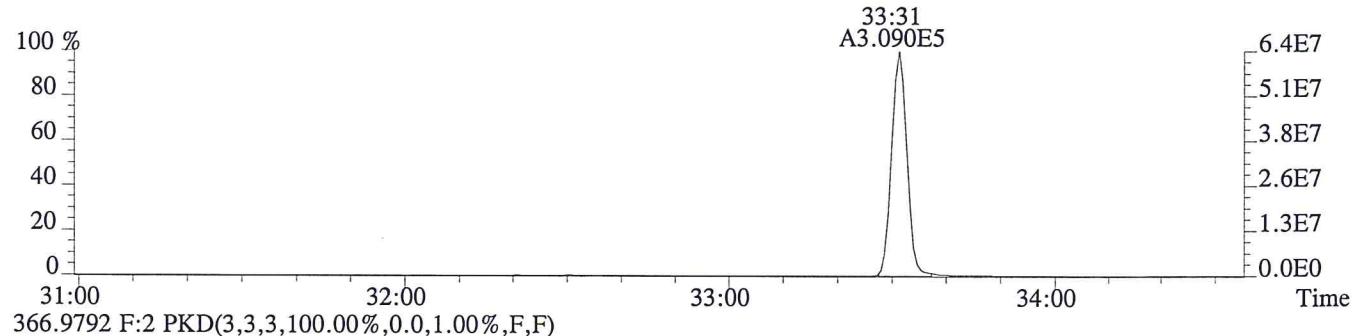
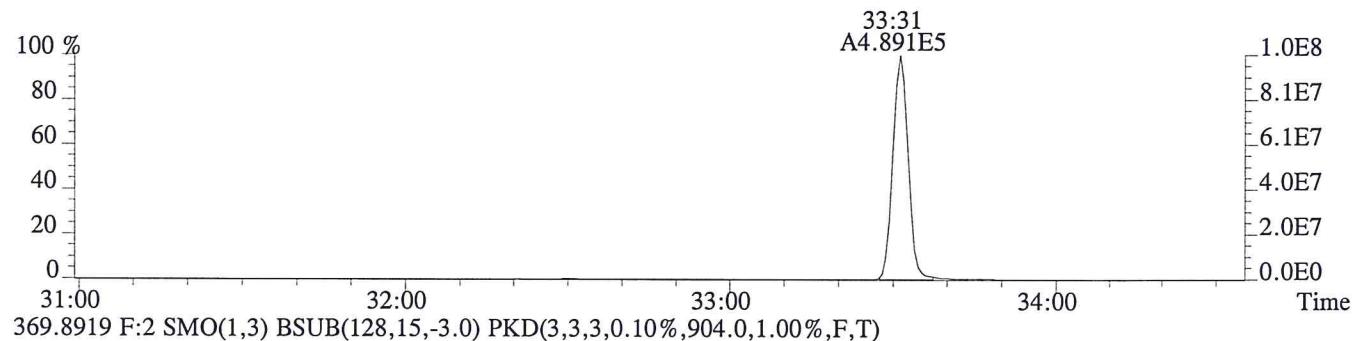
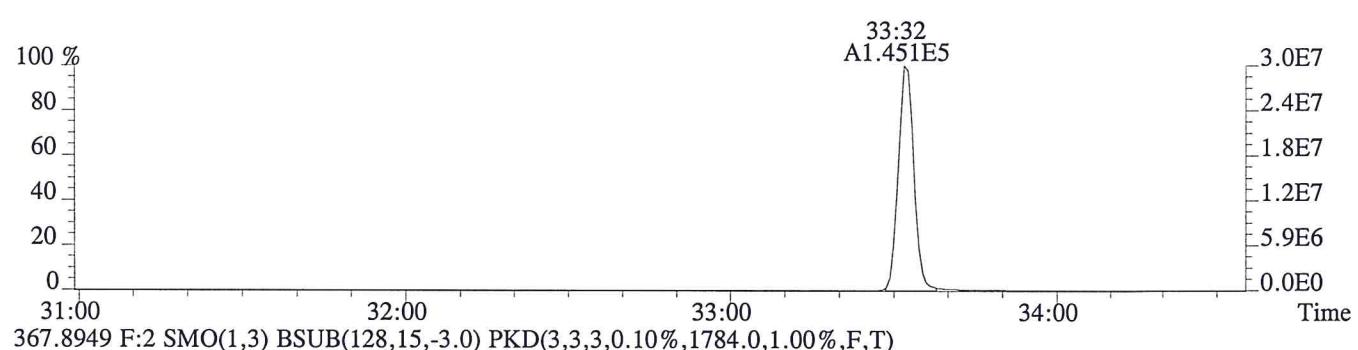
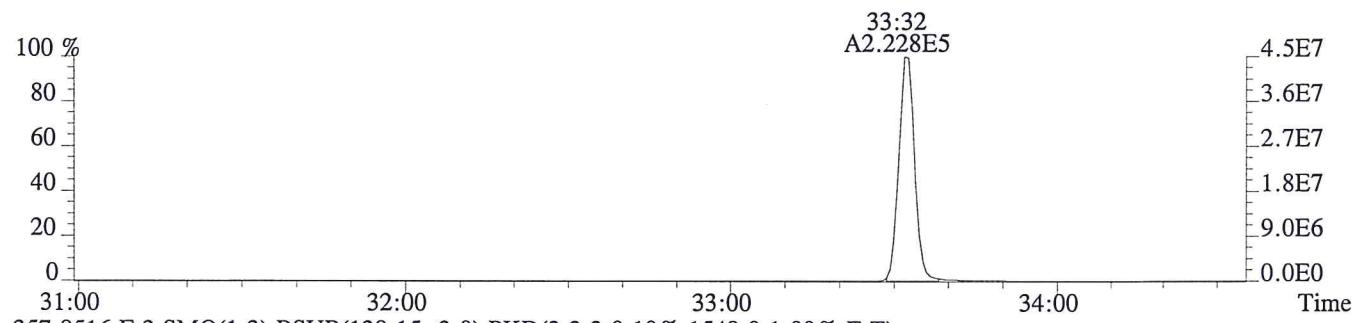
File:P600939 #1-562 Acq:13-OCT-2015 12:29:16 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:CS3  
 339.8597 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,920.0,1.00%,F,T)



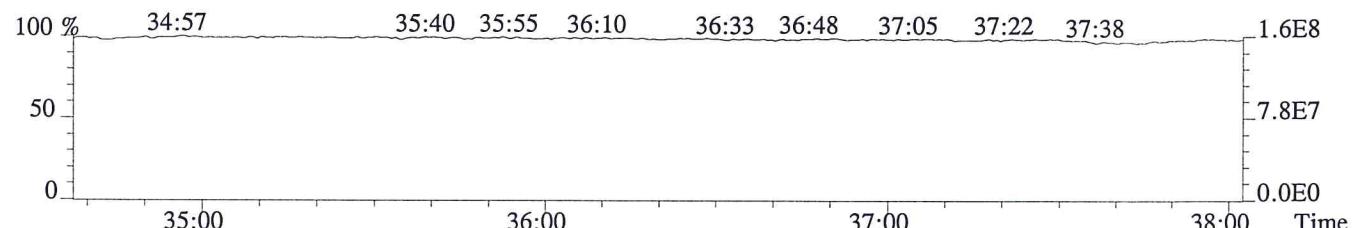
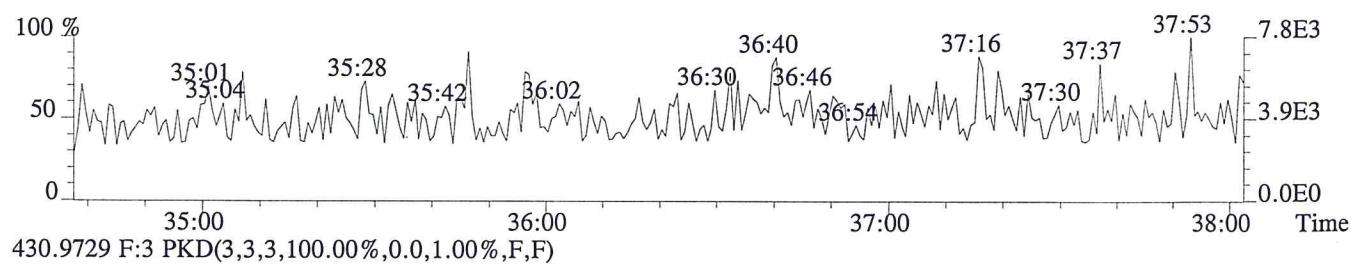
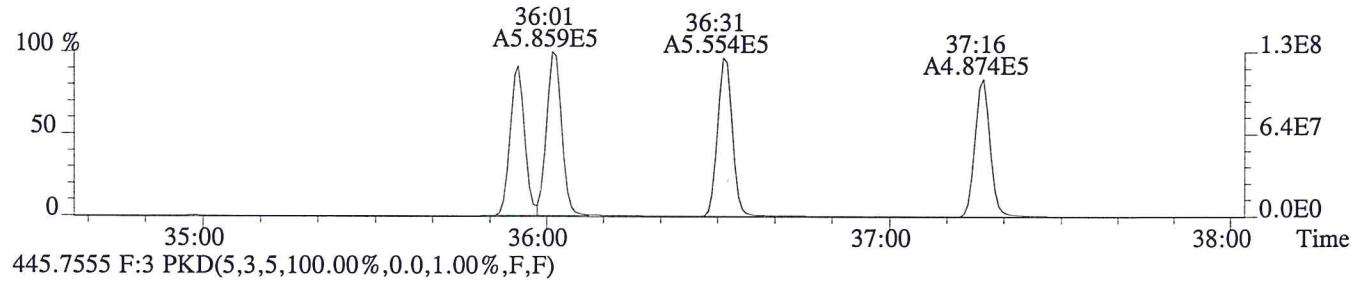
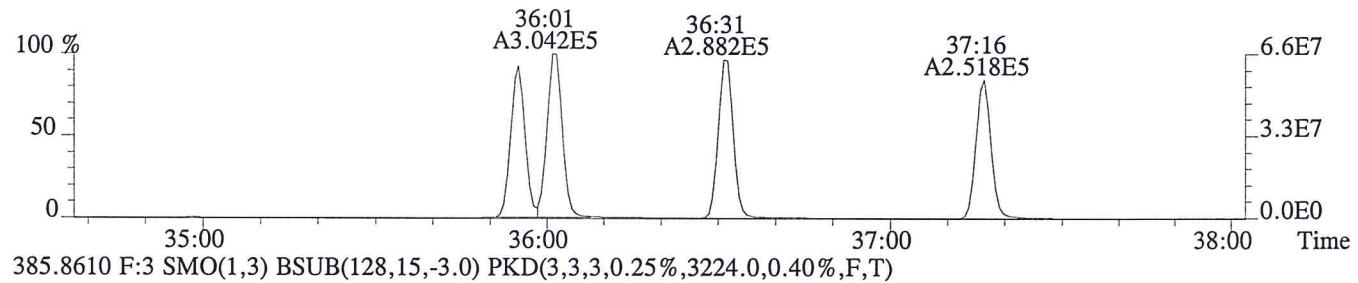
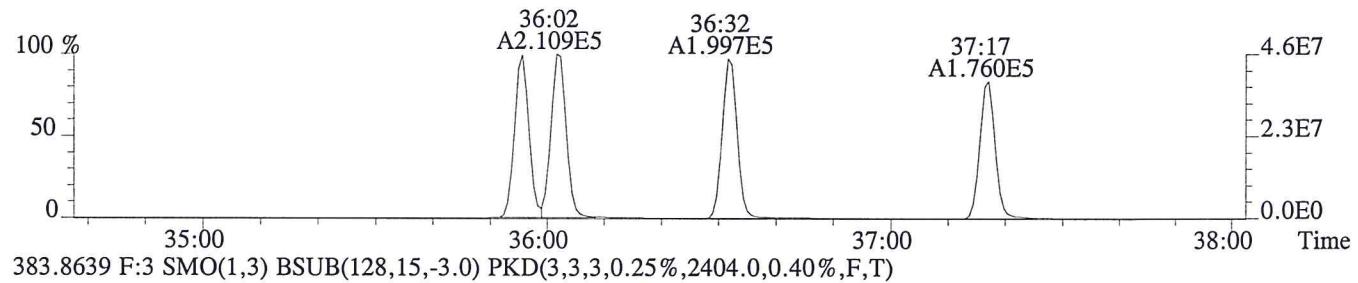
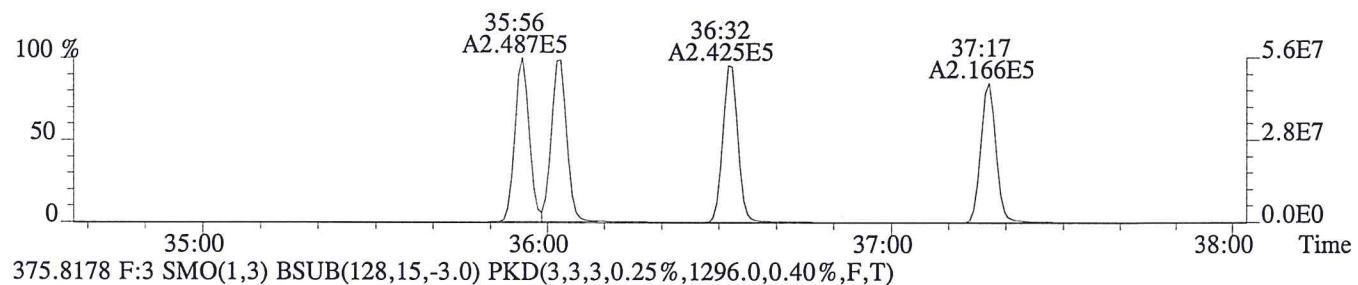
File:P600939 #1-325 Acq:13-OCT-2015 12:29:16 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:CS3  
 339.8597 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1208.0,1.00%,F,T)



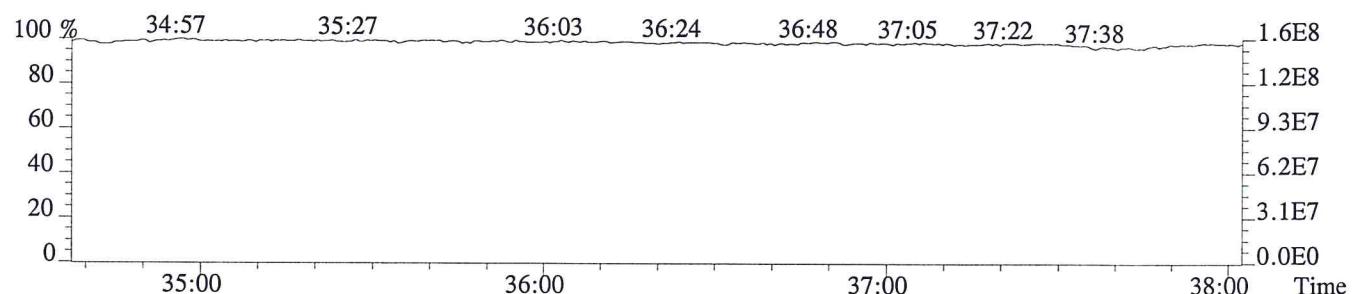
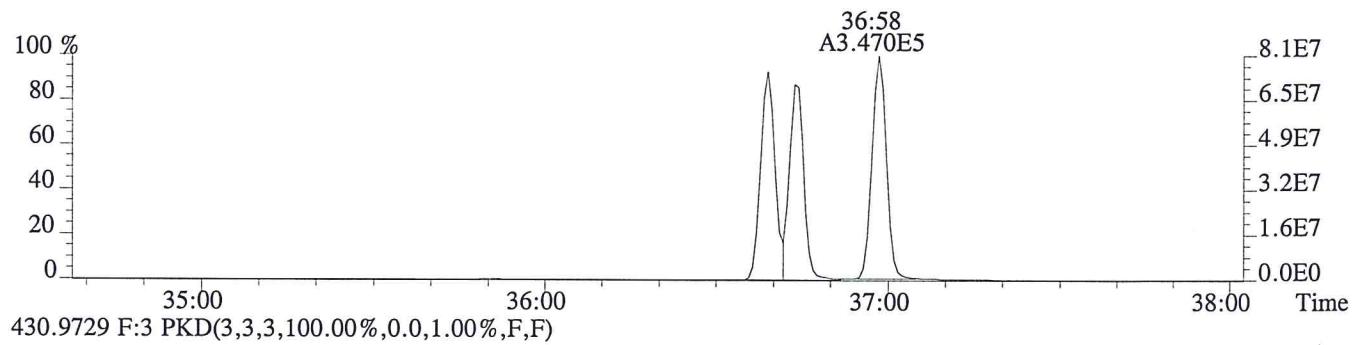
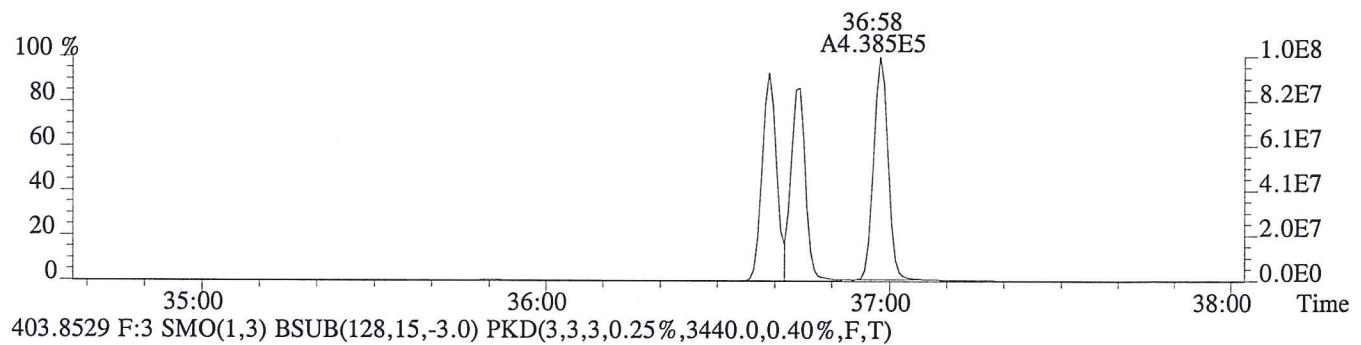
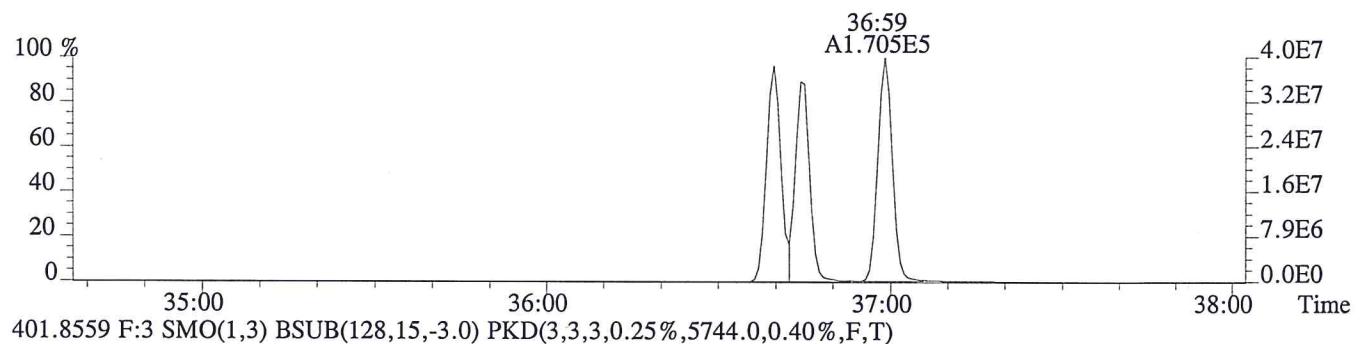
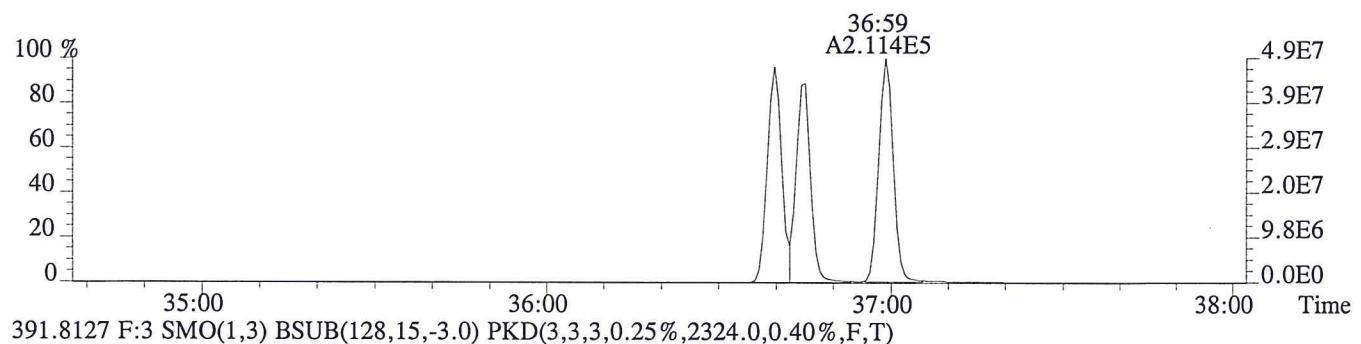
File:P600939 #1-325 Acq:13-OCT-2015 12:29:16 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:CS3  
 355.8546 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,2920.0,1.00%,F,T)



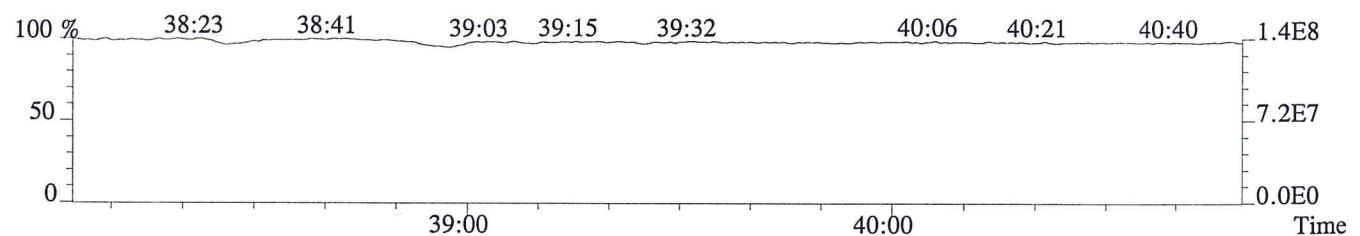
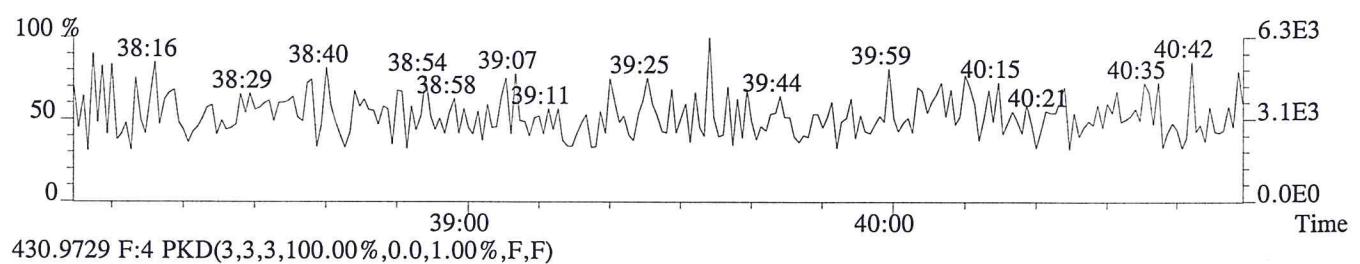
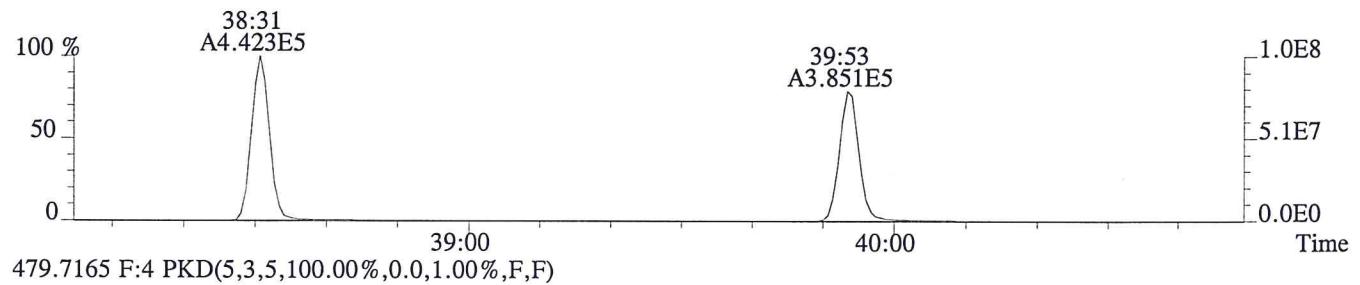
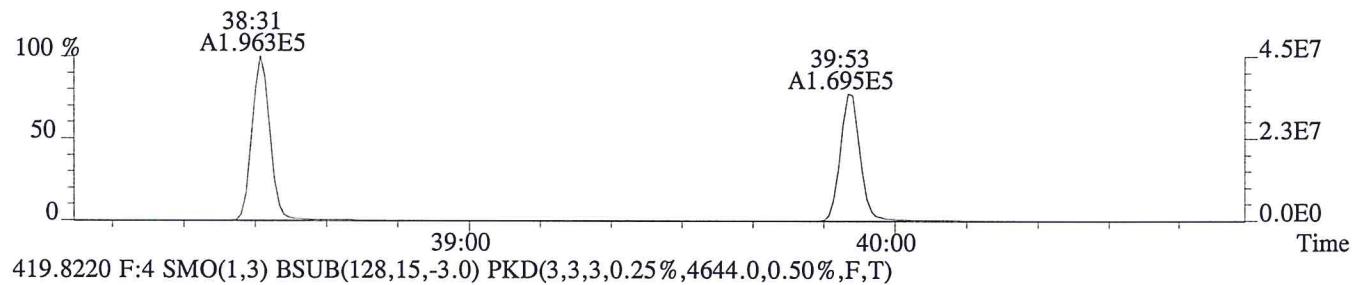
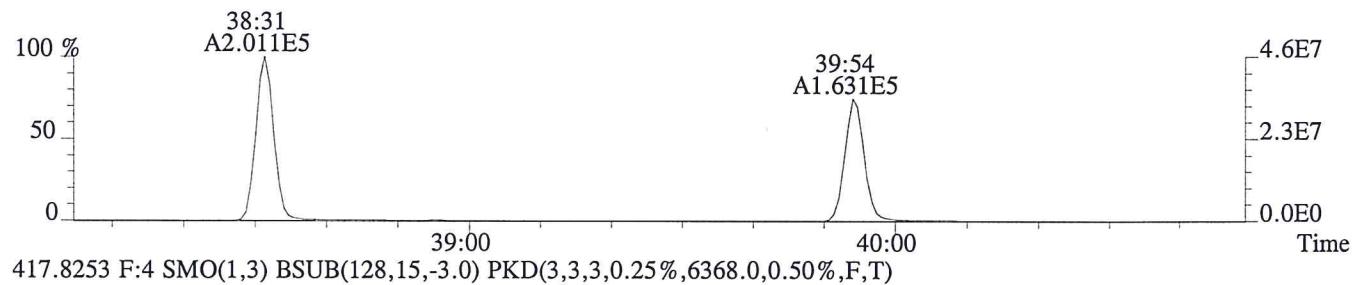
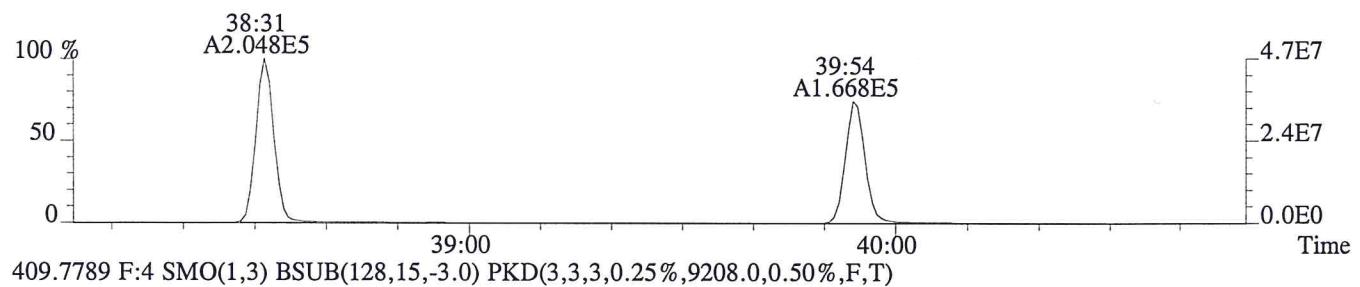
File:P600939 #1-308 Acq:13-OCT-2015 12:29:16 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:CS3  
 373.8208 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1344.0,0.40%,F,T)



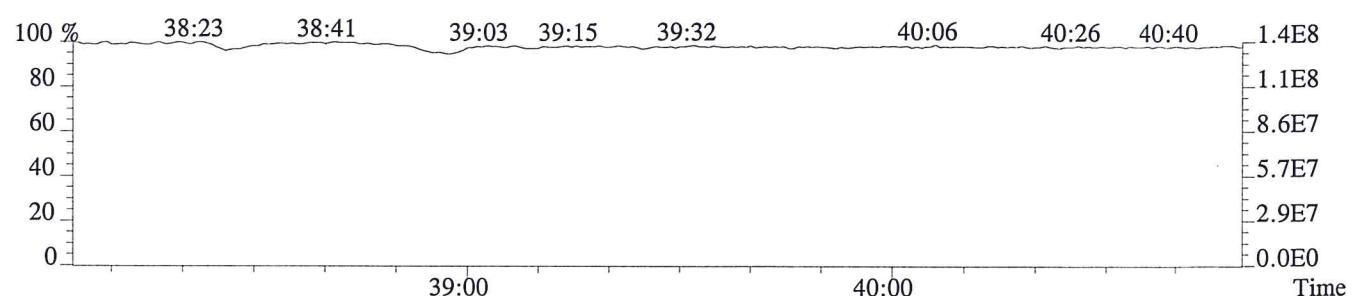
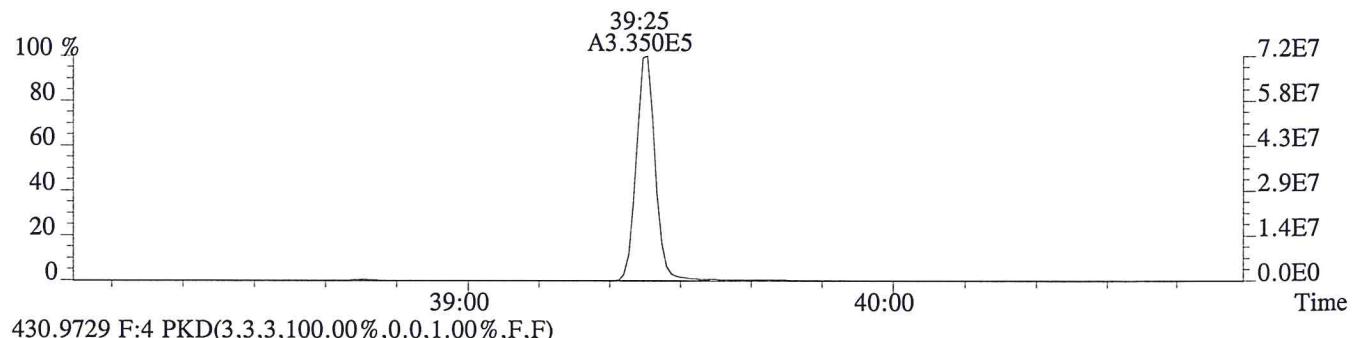
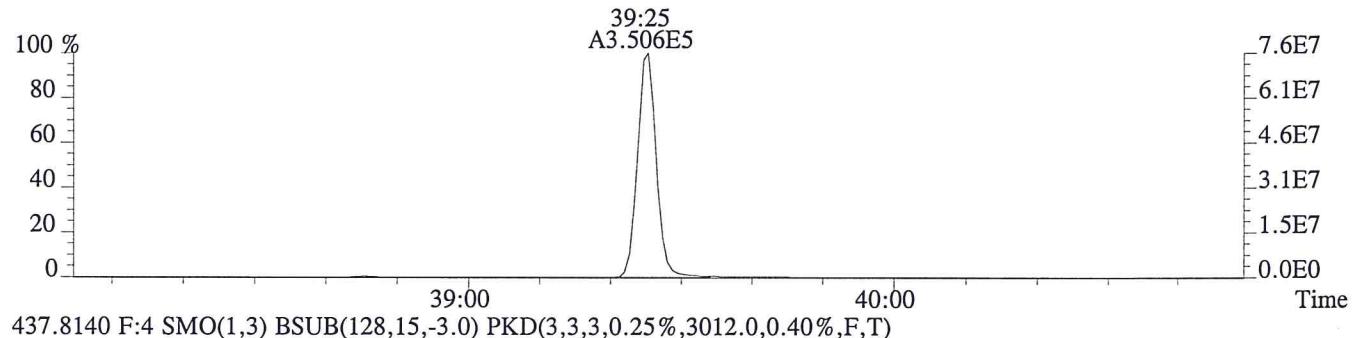
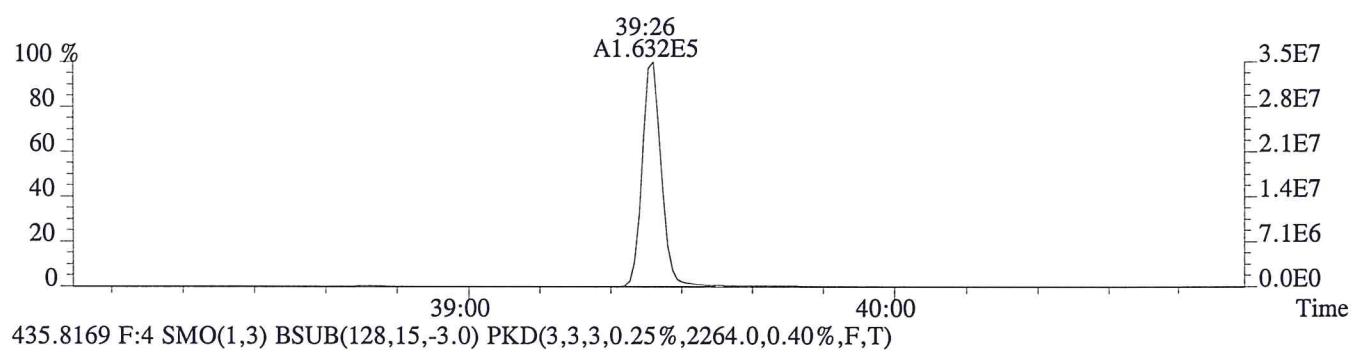
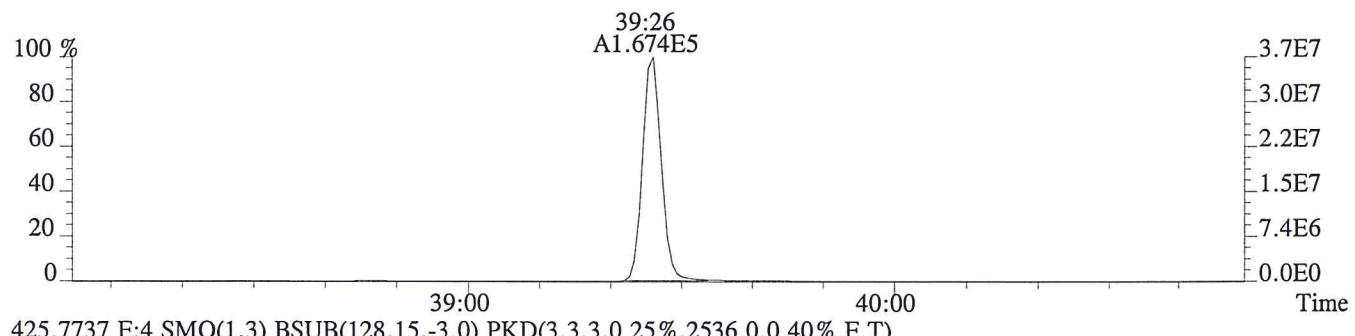
File:P600939 #1-308 Acq:13-OCT-2015 12:29:16 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:CS3  
 389.8157 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,3044.0,0.40%,F,T)



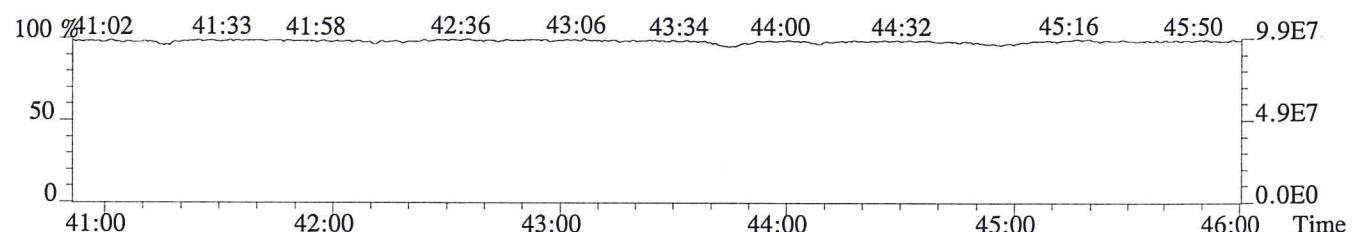
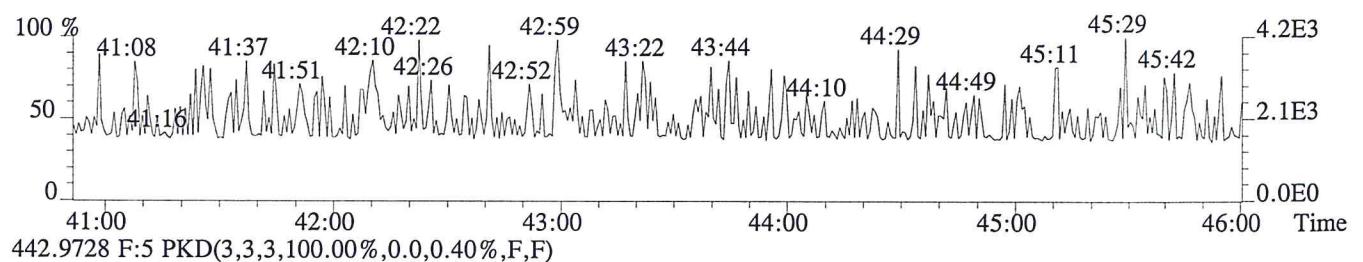
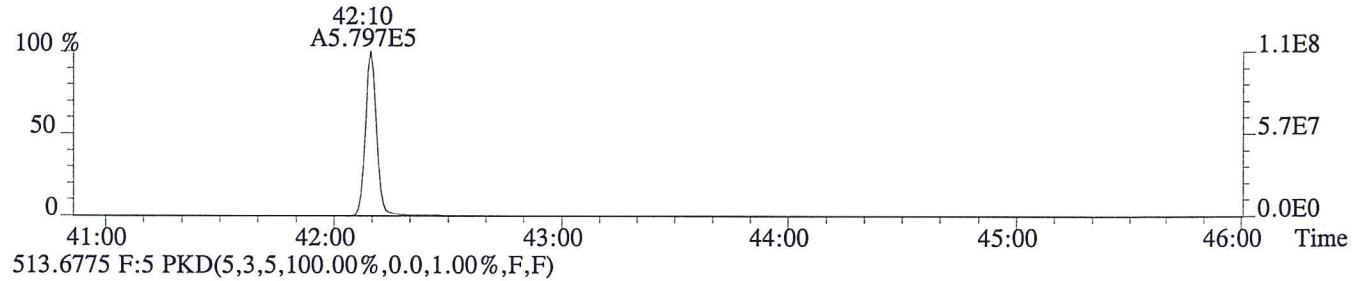
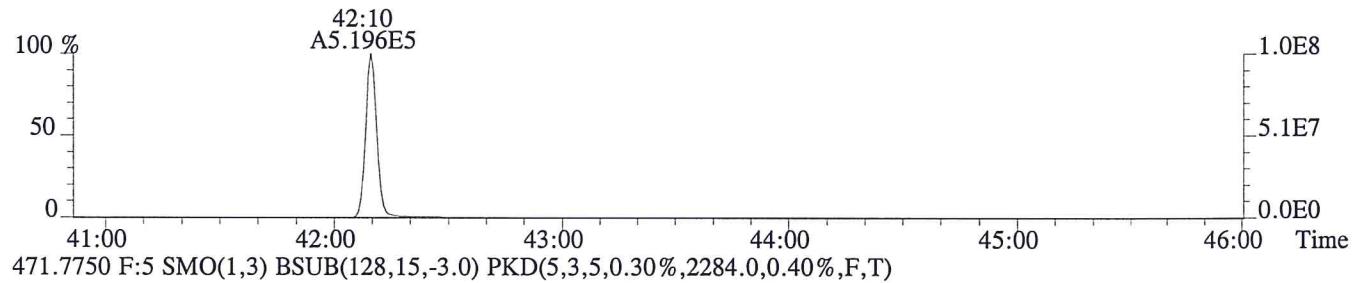
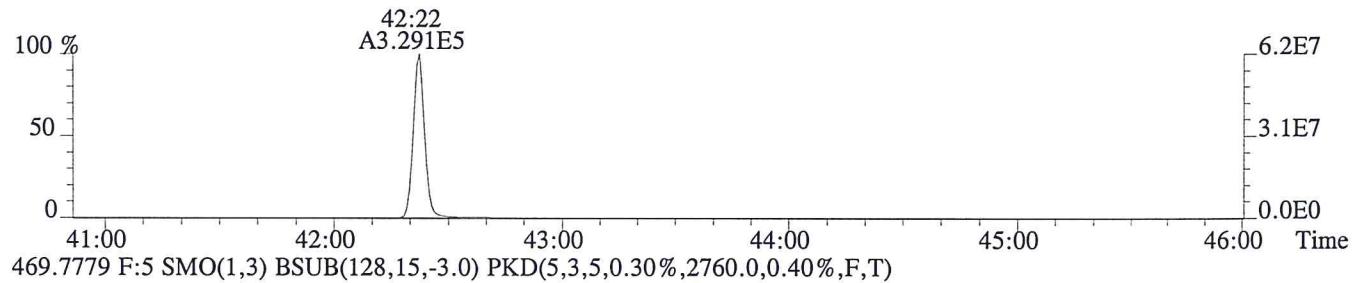
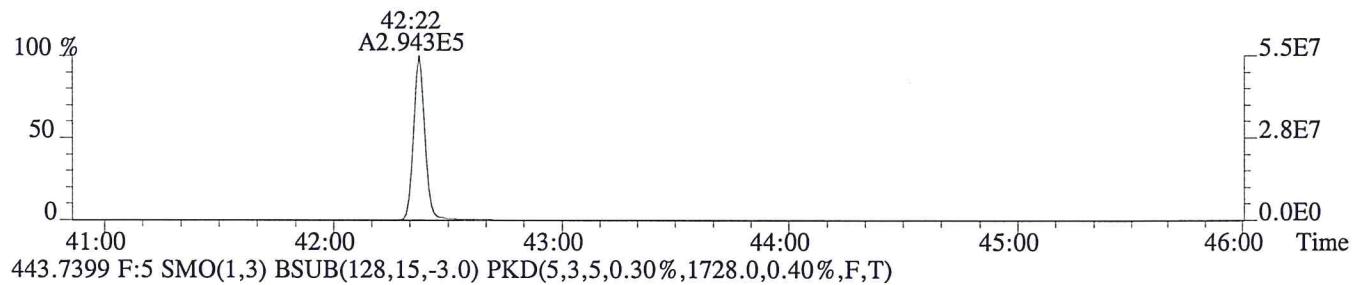
File:P600939 #1-248 Acq:13-OCT-2015 12:29:16 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:CS3  
 407.7818 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,3576.0,0.50%,F,T)



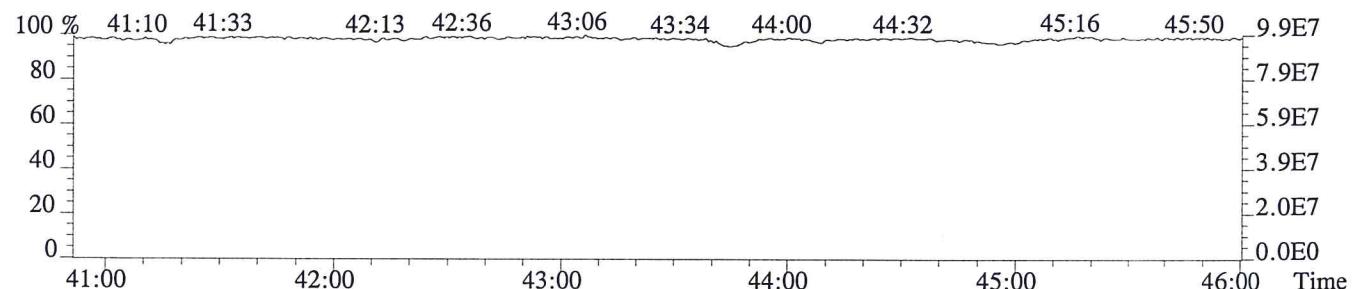
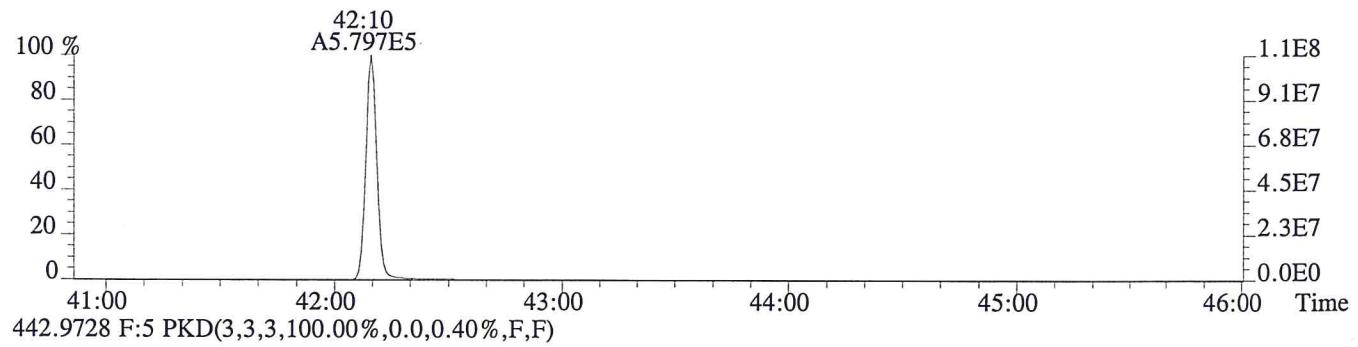
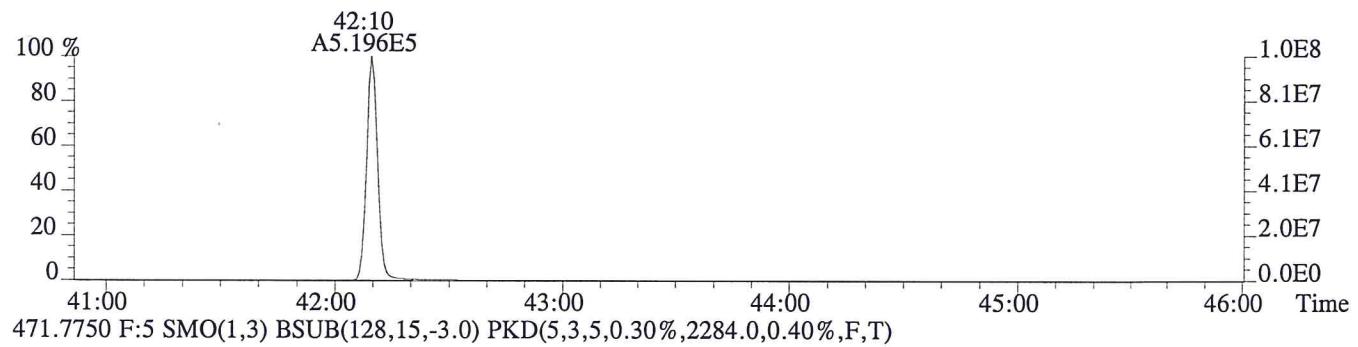
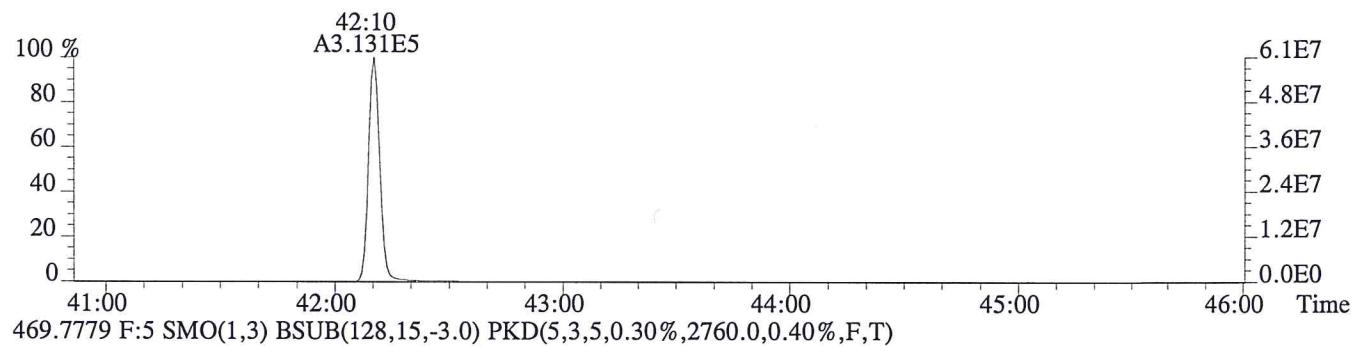
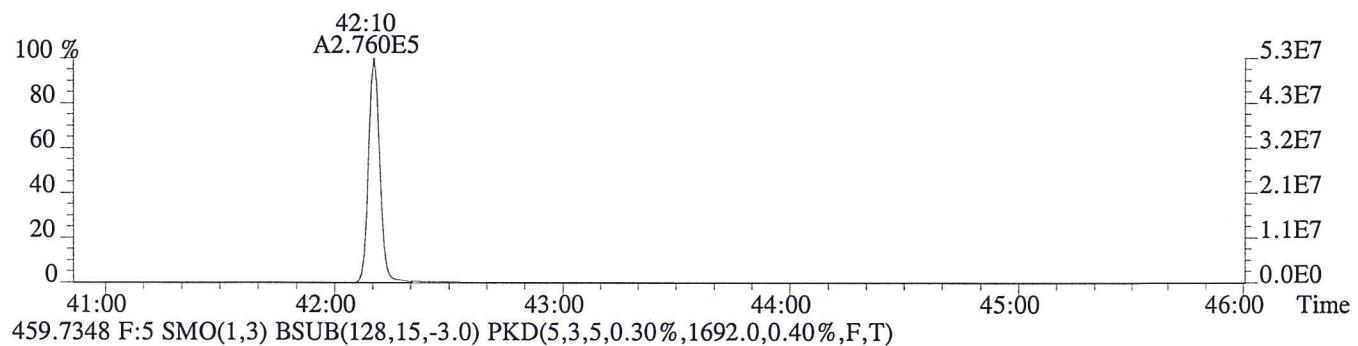
File:P600939 #1-248 Acq:13-OCT-2015 12:29:16 Probe EI+ Magnet SIR VG BioTech Mass spectf  
Sample#1 Exp:CS3  
423.7766 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1936.0,0.40%,F,T)



File:P600939 #1-464 Acq:13-OCT-2015 12:29:16 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:CS3  
 441.7428 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1196.0,0.40%,F,T)



File:P600939 #1-464 Acq:13-OCT-2015 12:29:16 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:CS3  
 457.7377 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1400.0,0.40%,F,T)



# CCAL HRCC3/CS3 Daily Calibration QC Checklist

Calibration File Name: P600954  
 Date: 10/14/15

Circle one:  
 Beginning /  Ending

Method: 1613 / 1613E / 8290 / VCP / Tetra / TCDD Only / TCDF Conf / VCP Conf / 8280 / M23 / TO-9A

Retention Window/Column Performance Check:

Analyst

Second Check

Windows in and first and last eluters labeled	✓	✓
Column Performance shows less than or equal to 25% valley between column specific 2378 isomer and its closest eluters	✓	✓
No QC ion deflections affect column specific 2378 isomer or its closest eluters (HRMS Only)	✓	✓

CS3 Continuing Calibration

Analyst

Second Check

Percent RSD within method criteria	✓	✓
All relative abundance ratios meet method criteria	✓	✓
No QC ion deflections of greater than 20% (HRMS Only)	✓	✓
Mass spectrometer resolution greater than or equal to 10,000 and documented (HRMS Only)	✓	✓
2378-TCDD elutes at 25 minutes or later on the DB-5 column / DB-5MSUI column	✓	✓
Signal-to-noise of all target analytes and their labeled standards at least 10:1	✓	-
Valley between labeled 123478 and 123678 HxCDD peaks less than or equal to 50% (LRMS Only)	N/A	N/A
Ending Calibration injected prior to end of 12 hour clock	N/A	N/A

Analyst: \_\_\_\_\_

ccalqc.xls 07/17/12

Second QC: \_\_\_\_\_

5DFC  
PCDD/PCDF ANALYTICAL SEQUENCE SUMMARY

Lab Name: ALS ENVIRONMENTAL

Contract:

Lab Code:

Case No.:

Client No.:

SDG No.:

GC Column: DB-5MSUI ID: 0.25 (mm)

Init. Calib. Date: 08/19/15

Init. Calib.Times: 10:52

THE ANALYTICAL SEQUENCE OF STANDARDS, SAMPLES, BLANKS, AND LABORATORY CONTROL SAMPLES (LCSS) IS AS FOLLOWS:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
84084	WINDOW DEFINE	P600956	14-OCT-15	03:46:09
84080	CS3	P600954	14-OCT-15	02:09:16
METHOD BLANK	EQ1500557-01	P600957	14-OCT-15	04:35:14
AQUEOUS MDL STUDY-7	E1501001-001	P600958	14-OCT-15	05:24:19
AQUEOUS MDL STUDY-7	E1501001-002	P600959	14-OCT-15	06:13:20
AQUEOUS MDL STUDY-7	E1501001-003	P600960	14-OCT-15	07:02:25
AQUEOUS MDL STUDY-7	E1501001-004	P600961	14-OCT-15	07:51:30
AQUEOUS MDL STUDY-7	E1501001-005	P600962	14-OCT-15	08:40:31
AQUEOUS MDL STUDY-7	E1501001-006	P600963	14-OCT-15	09:29:37
AQUEOUS MDL STUDY-7	E1501001-007	P600964	14-OCT-15	10:18:38
AQUEOUS MDL STUDY-7	E1501001-008	P600965	14-OCT-15	11:07:38
LCS	EQ1500602-02	P600966	14-OCT-15	11:56:44
DLCS	EQ1500602-03	P600967	14-OCT-15	12:45:45

## Sample List Report

## MassLynx 4.1 SCN815 SCN795

Sample List: C:\MassLynx\EHRMS08.PRO\SampleDB\20151013B.SPL  
 Last Modified: Wednesday, October 14, 2015 16:05:02 Eastern Daylight Time  
 Printed: Wednesday, October 14, 2015 16:05:12 Eastern Daylight Time

Page 1 of 2

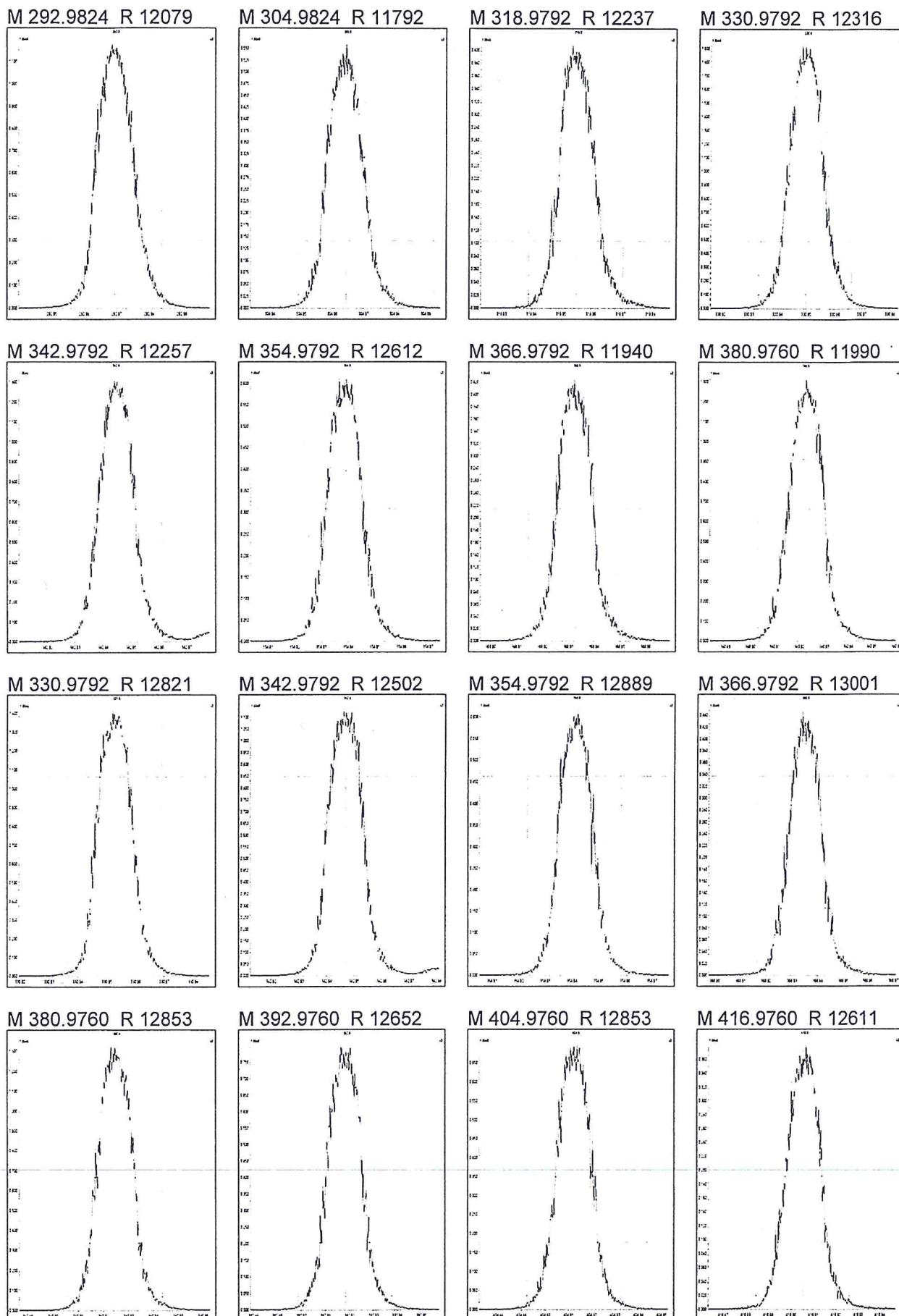
Page Position (1, 1)

*opus4(e) Poco954res*

Date	Time	File Name	Lab Sample ID	Client File Text	Bottle	MS File	Inlet File	Analyst	Comments
1 10/14/15	02:09	P600954	84080	CS3	Tray1:1	EPA1613_ALS	Dioxin_ALS	<i>DL</i>	<i>HRMS check 02:09</i>
2	02:57	P600955	84084	WD	Tray1:2	EPA1613_ALS	Dioxin_ALS	<i>T</i>	
3	03:40	P600956	84084	WD	Tray1:3	EPA1613_ALS	Dioxin_ALS		
4	04:35	P600957	EQ1500557-01	MB	Tray1:4	EPA1613_ALS	Dioxin_ALS		
5	05:24	P600958	E1501001-001	E1501001-001	Tray1:5	EPA1613_ALS	Dioxin_ALS		
6	06:13	P600959	E1501001-002	E1501001-002	Tray1:6	EPA1613_ALS	Dioxin_ALS		
7	07:02	P600960	E1501001-003	E1501001-003	Tray1:7	EPA1613_ALS	Dioxin_ALS		
8	07:51	P600961	E1501001-004	E1501001-004	Tray1:8	EPA1613_ALS	Dioxin_ALS		
9	08:40	P600962	E1501001-005	E1501001-005	Tray1:9	EPA1613_ALS	Dioxin_ALS		
10	09:29	P600963	E1501001-006	E1501001-006	Tray1:10	EPA1613_ALS	Dioxin_ALS		
11	10:18	P600964	E1501001-007	E1501001-007	Tray1:11	EPA1613_ALS	Dioxin_ALS		
12	11:07	P600965	E1501001-008	E1501001-008	Tray1:12	EPA1613_ALS	Dioxin_ALS		
13	11:56	P600966	EQ1500602-02	EQ1500602-02	Tray1:13	EPA1613_ALS	Dioxin_ALS		
14	12:45	P600967	EQ1500602-03	EQ1500602-03	Tray1:14	EPA1613_ALS	Dioxin_ALS	<i>V</i>	<i>HRMS check 13:42</i>
15		--	--	--	Tray1:15	EPA1613_ALS	Dioxin_ALS		
16		--	--	--	Tray1:16	EPA1613_ALS	Dioxin_ALS		
17		--	--	--	Tray1:17	EPA1613_ALS	Dioxin_ALS		
18		--	--	--	Tray1:18	EPA1613_ALS	Dioxin_ALS		
19		--	--	--	Tray1:19	EPA1613_ALS	Dioxin_ALS		
20		--	--	--	Tray1:20	EPA1613_ALS	Dioxin_ALS		
21		--	--	--	Tray1:21	EPA1613_ALS	Dioxin_ALS		
22		--	--	--	Tray1:22	EPA1613_ALS	Dioxin_ALS		
23		--	--	--	Tray1:23	EPA1613_ALS	Dioxin_ALS		
24		--	--	--	Tray1:24	EPA1613_ALS	Dioxin_ALS		
25		--	--	--	Tray1:25	EPA1613_ALS	Dioxin_ALS		
26		--	--	--	Tray1:26	EPA1613_ALS	Dioxin_ALS		
27		--	--	--	Tray1:27	EPA1613_ALS	Dioxin_ALS		
28		--	--	--	Tray1:28	EPA1613_ALS	Dioxin_ALS		
29		--	--	--	Tray1:29	EPA1613_ALS	Dioxin_ALS		
30		--	--	--	Tray1:30	EPA1613_ALS	Dioxin_ALS		
31		--	--	--	Tray1:31	EPA1613_ALS	Dioxin_ALS		
32		--	--	--	Tray1:32	EPA1613_ALS	Dioxin_ALS		
33		--	--	--	Tray1:33	EPA1613_ALS	Dioxin_ALS		
34		--	--	--	Tray1:34	EPA1613_ALS	Dioxin_ALS		
35		--	--	--	Tray1:35	EPA1613_ALS	Dioxin_ALS		
36		--	--	--	Tray1:36	EPA1613_ALS	Dioxin_ALS		
37		--	--	--	Tray1:37	EPA1613_ALS	Dioxin_ALS		
38		--	--	--	Tray1:38	EPA1613_ALS	Dioxin_ALS		
39		--	--	--	Tray1:39	EPA1613_ALS	Dioxin_ALS		

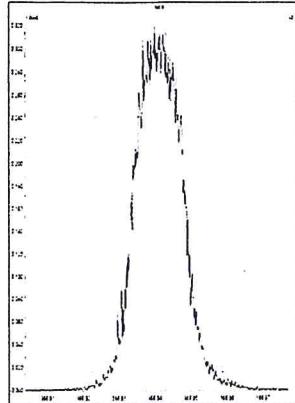
*QC 10/21/15*  
077

Printed: Wednesday, October 14, 2015 02:09:14 Eastern Daylight Time

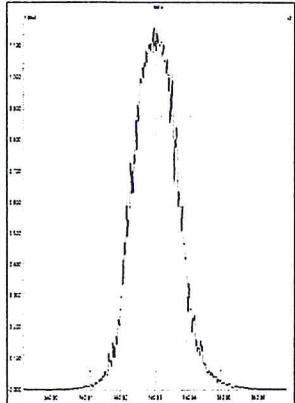


Printed: Wednesday, October 14, 2015 02:09:14 Eastern Daylight Time

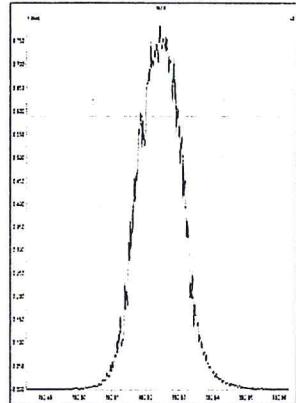
M 366.9792 R 13037



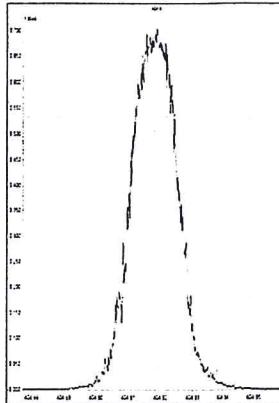
M 380.9760 R 13332



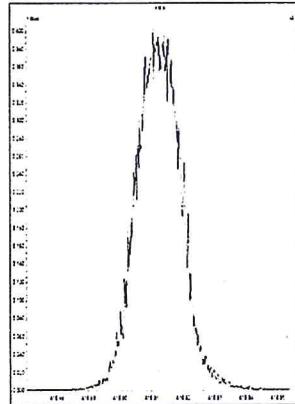
M 392.9760 R 13123



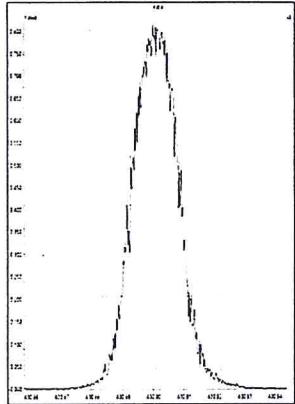
M 404.9760 R 13273



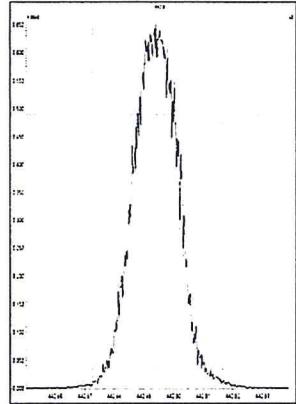
M 416.9760 R 13089



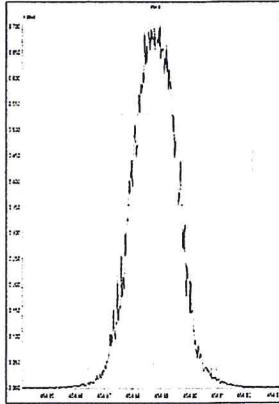
M 430.9728 R 13404



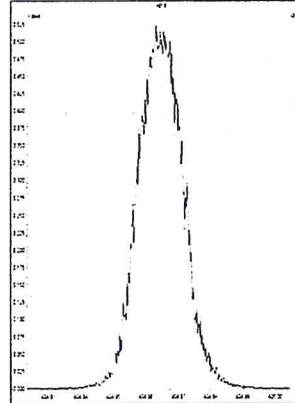
M 442.9728 R 12889



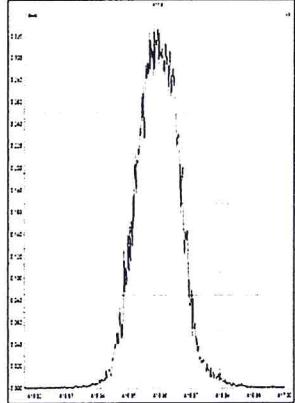
M 454.9728 R 13021



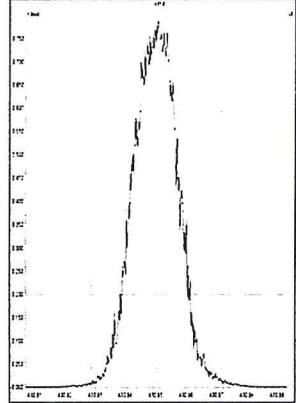
M 404.9760 R 13513



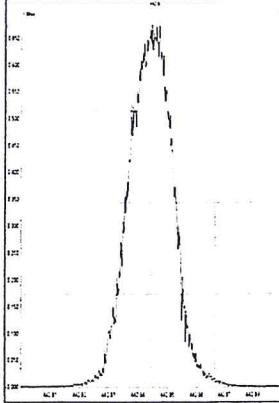
M 416.9760 R 13278



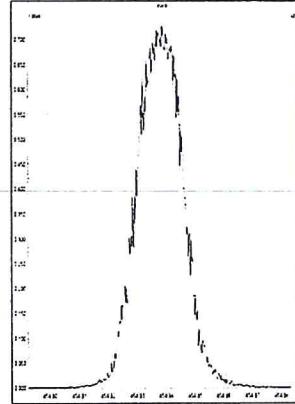
M 430.9728 R 13021



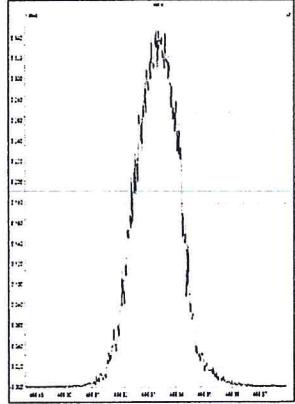
M 442.9728 R 13192



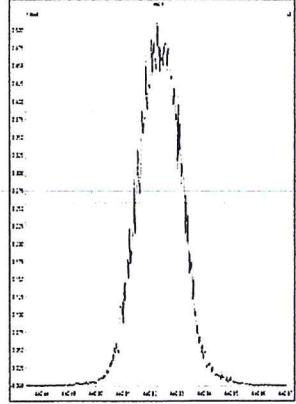
M 454.9728 R 13023



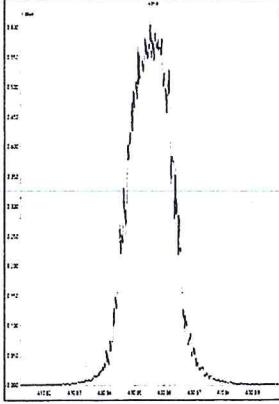
M 466.9728 R 13550



M 480.9696 R 13213

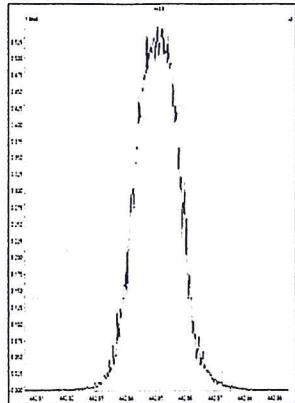


M 430.9728 R 13628

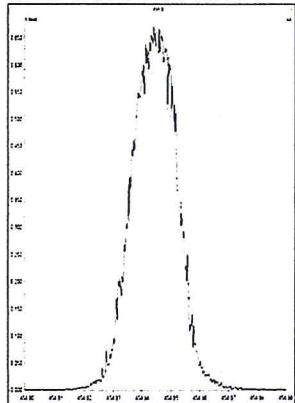


Printed: Wednesday, October 14, 2015 02:09:14 Eastern Daylight Time

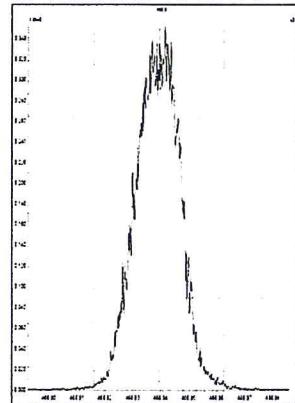
M 442.9728 R 13513



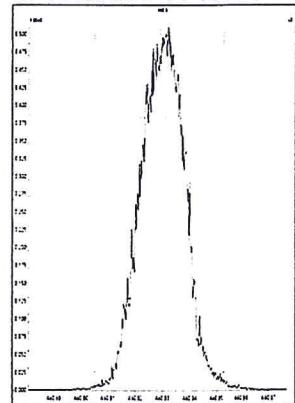
M 454.9728 R 13476



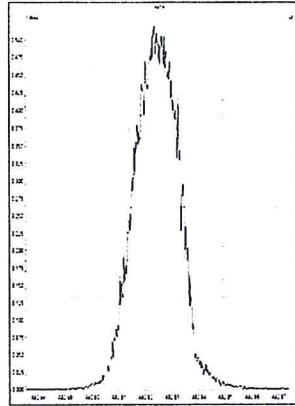
M 466.9728 R 13476



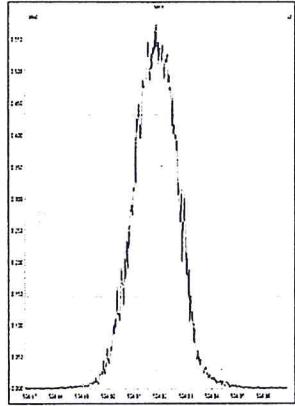
M 480.9696 R 13297



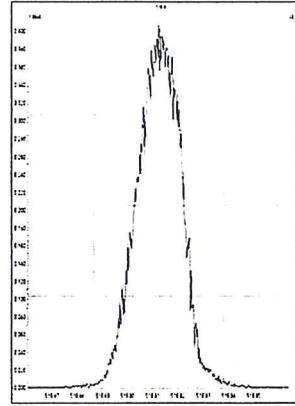
M 492.9696 R 13592



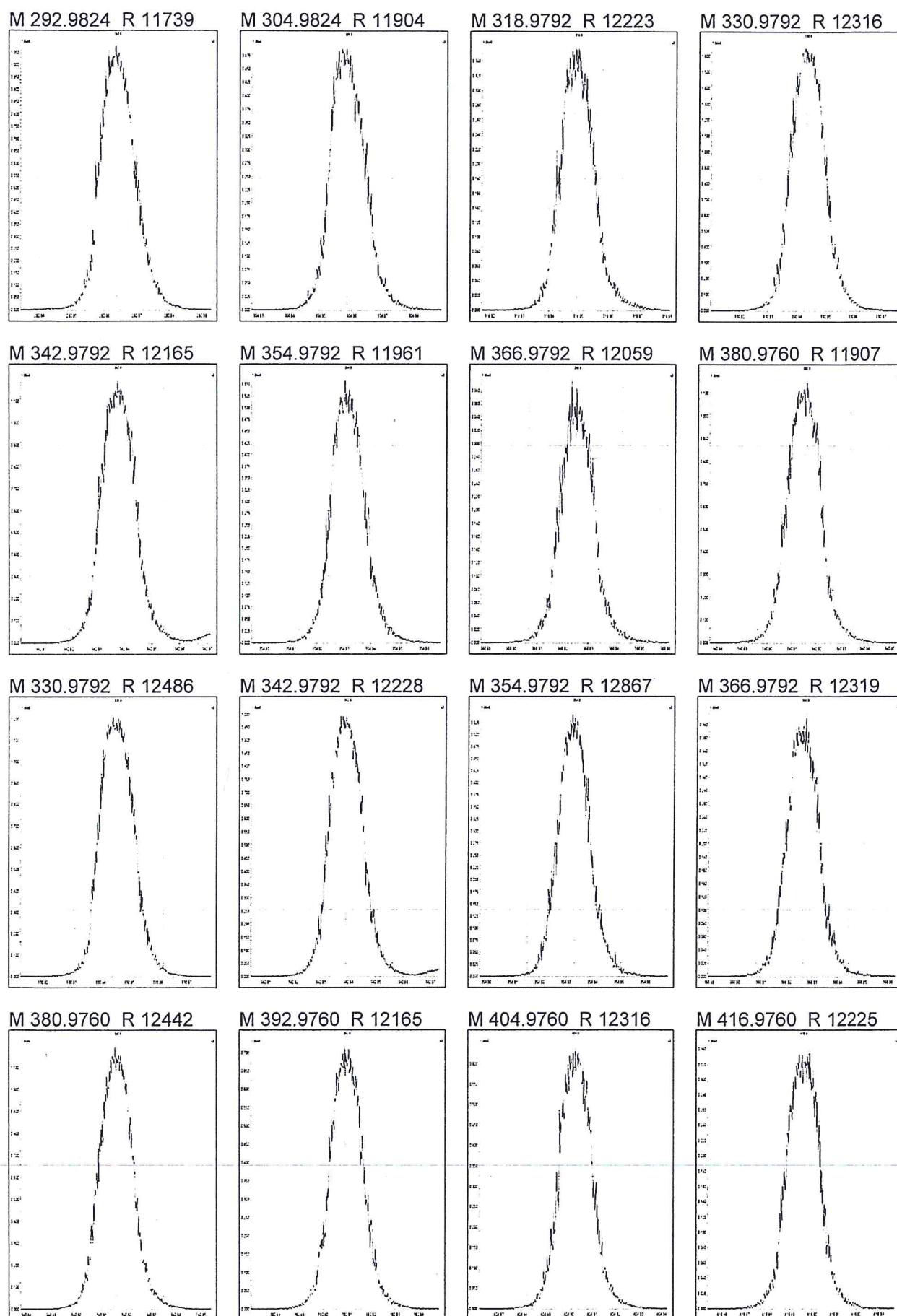
M 504.9696 R 13228



M 516.9697 R 12854

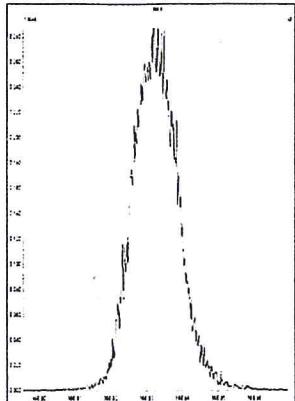


Printed: Wednesday, October 14, 2015 13:42:56 Eastern Daylight Time

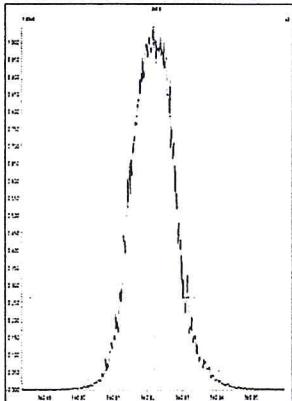


Printed: Wednesday, October 14, 2015 13:42:56 Eastern Daylight Time

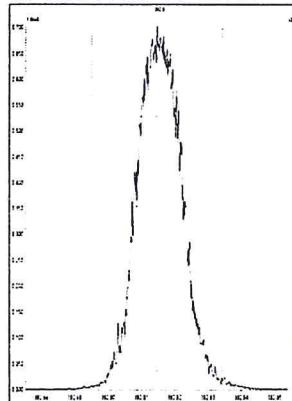
M 366.9792 R 13023



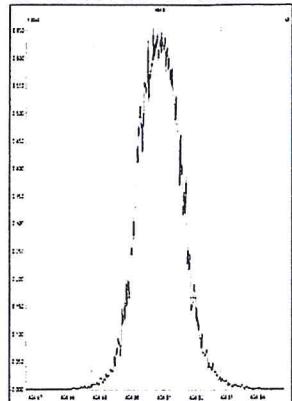
M 380.9760 R 12726



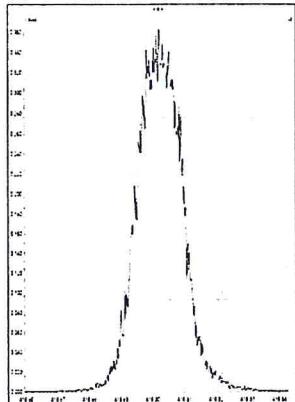
M 392.9760 R 13157



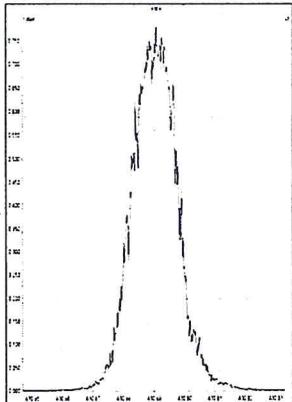
M 404.9760 R 12886



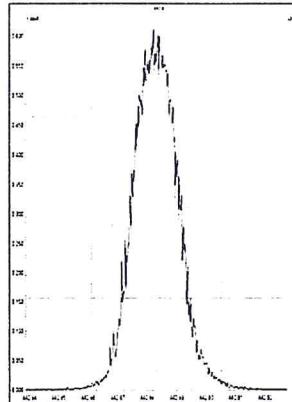
M 416.9760 R 13192



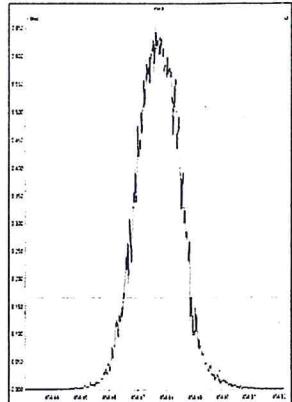
M 430.9728 R 12794



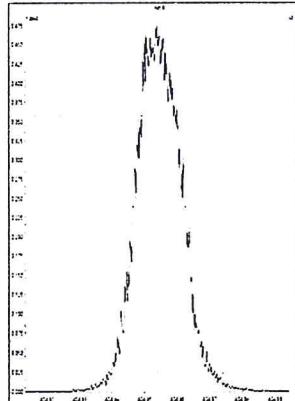
M 442.9728 R 12789



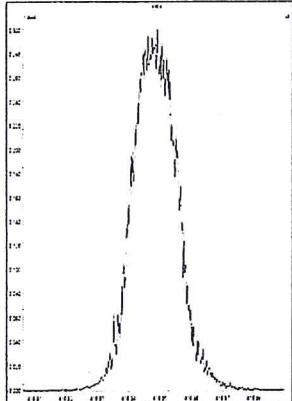
M 454.9728 R 12820



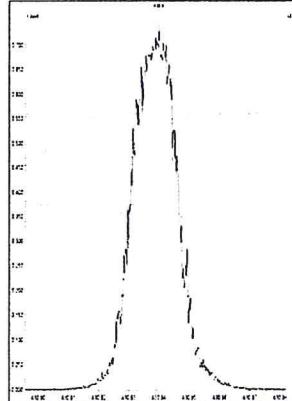
M 404.9760 R 12988



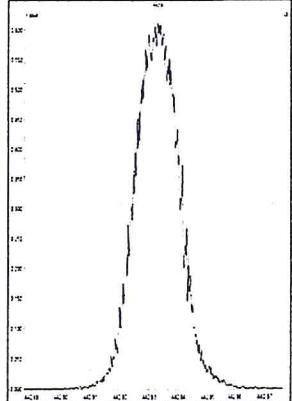
M 416.9760 R 13412



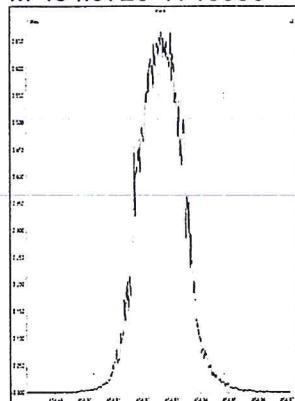
M 430.9728 R 13193



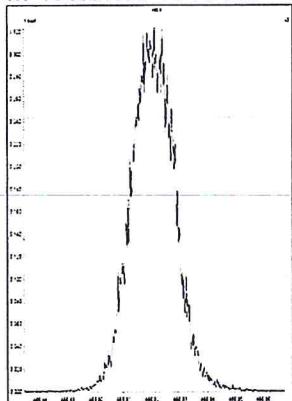
M 442.9728 R 13301



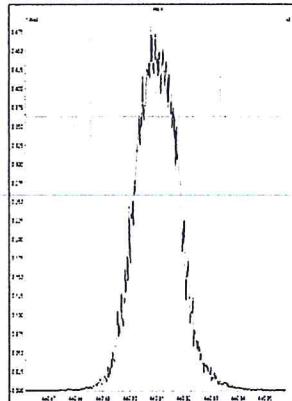
M 454.9728 R 13055



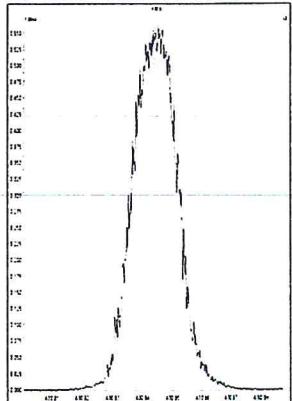
M 466.9728 R 13123



M 480.9696 R 13927



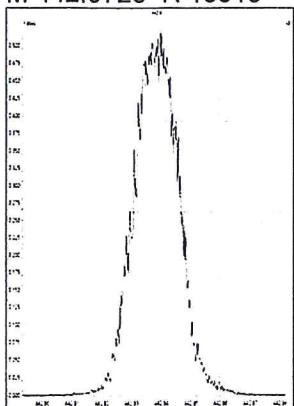
M 430.9728 R 13624



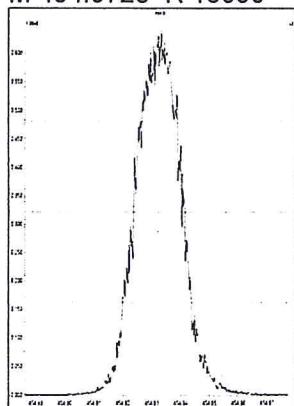
Printed: Wednesday, October 14, 2015 13:42:56 Eastern Daylight Time

---

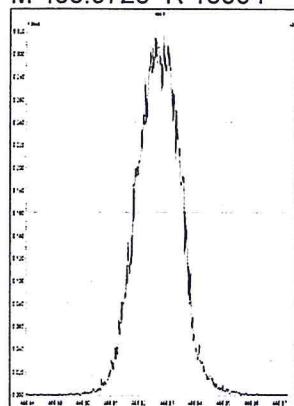
M 442.9728 R 13516



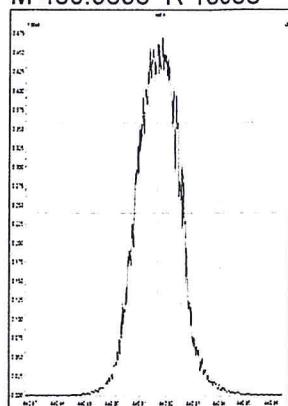
M 454.9728 R 13090



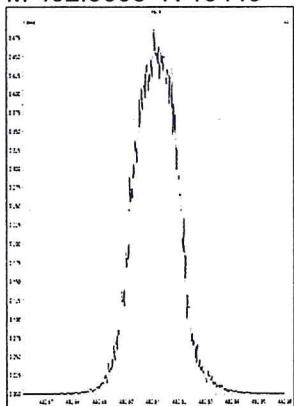
M 466.9728 R 13554



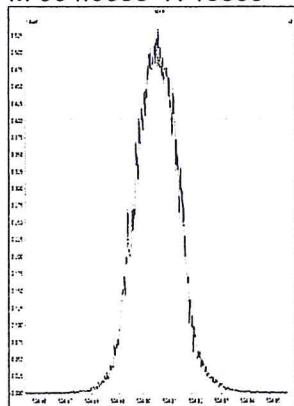
M 480.9696 R 13588



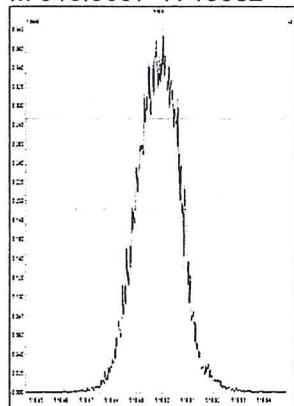
M 492.9696 R 13440



M 504.9696 R 13333



M 516.9697 R 13382



5DFA

## WINDOW DEFINING MIX SUMMARY

CLIENT ID:

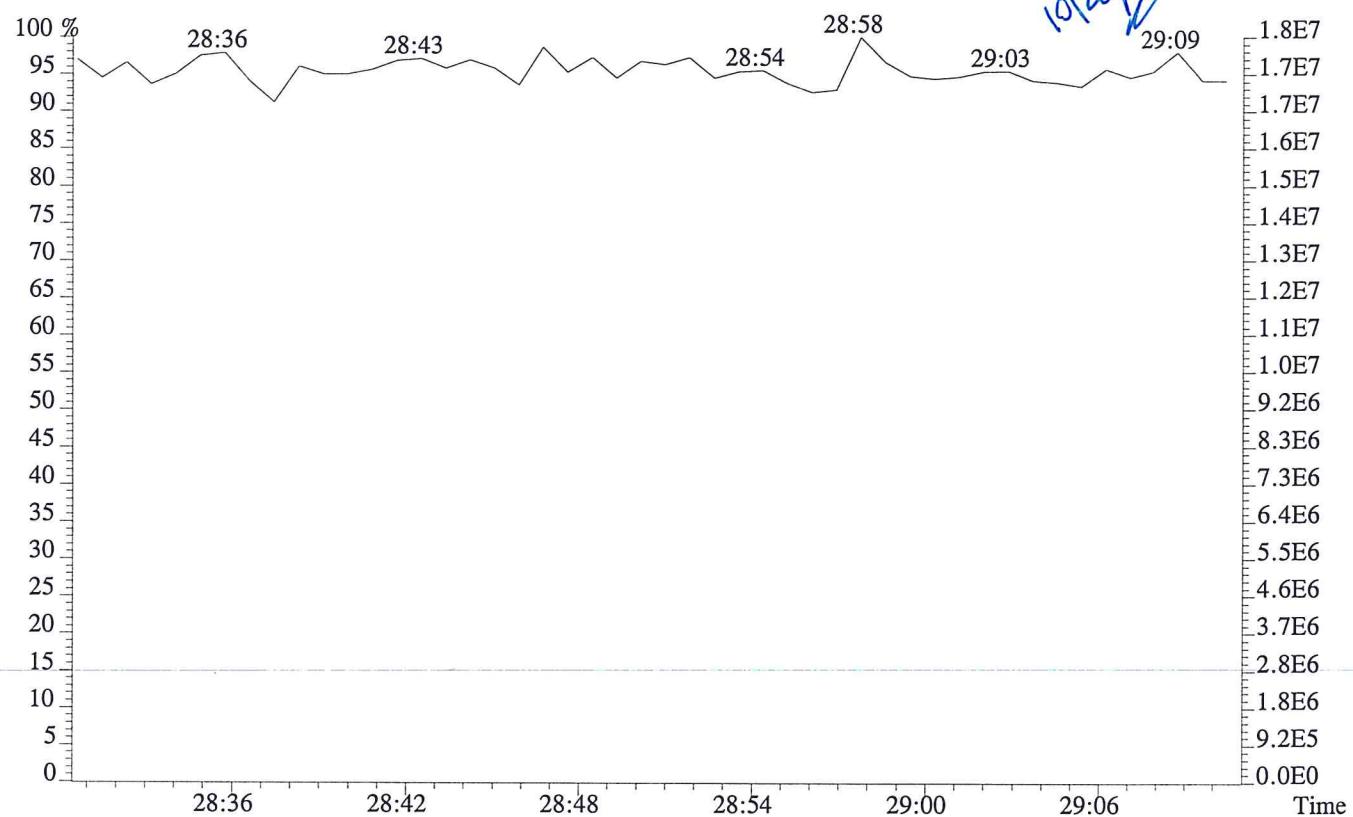
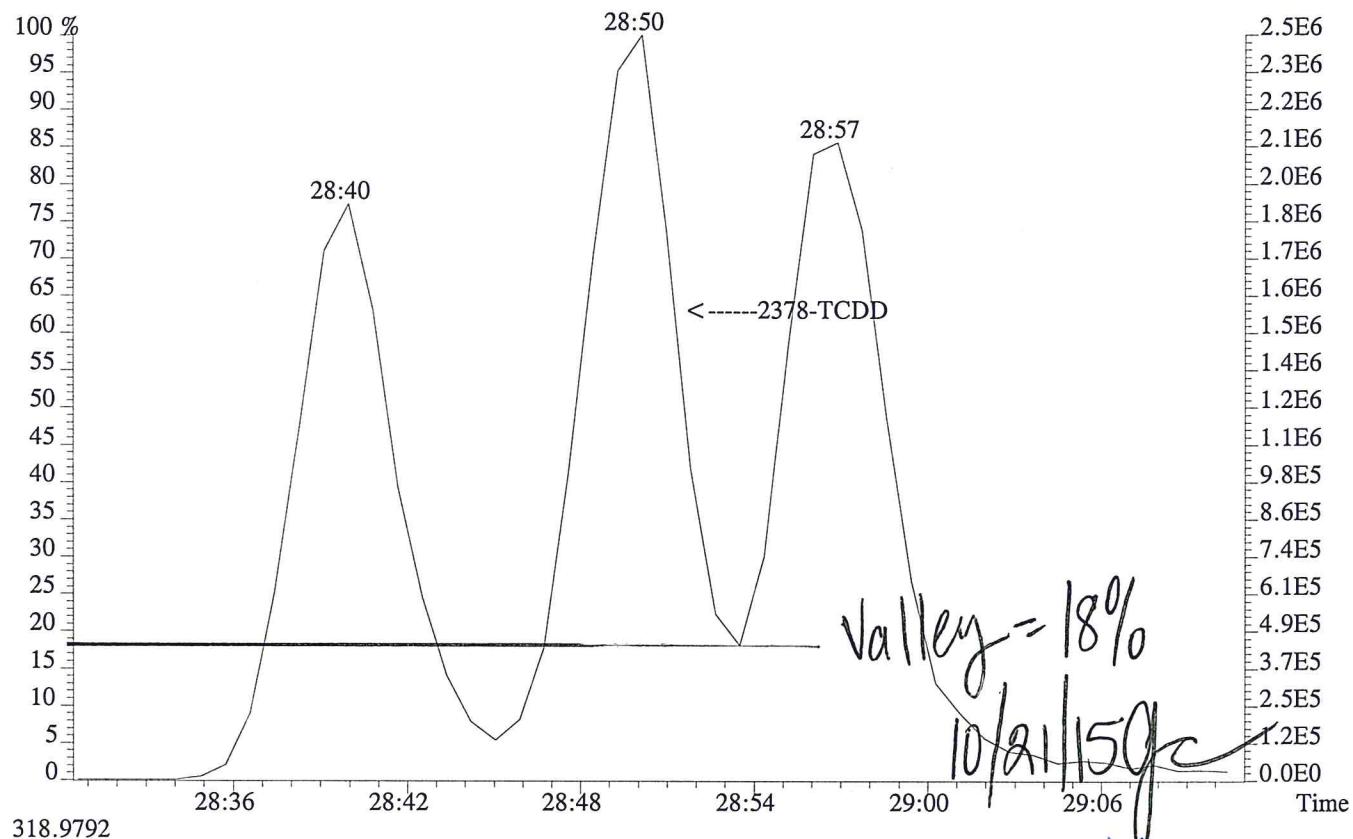
WDM

Lab Name: ALS Environmental  
Lab Code: ALSTX Case No.: \_\_\_\_\_ SDG No.:  
GC Column: DB-5MSUI ID: 0.25 (mm) Lab File ID: P600956  
Date Analyzed: 14-OCT-2015  
Time Analyzed: 03:46:09

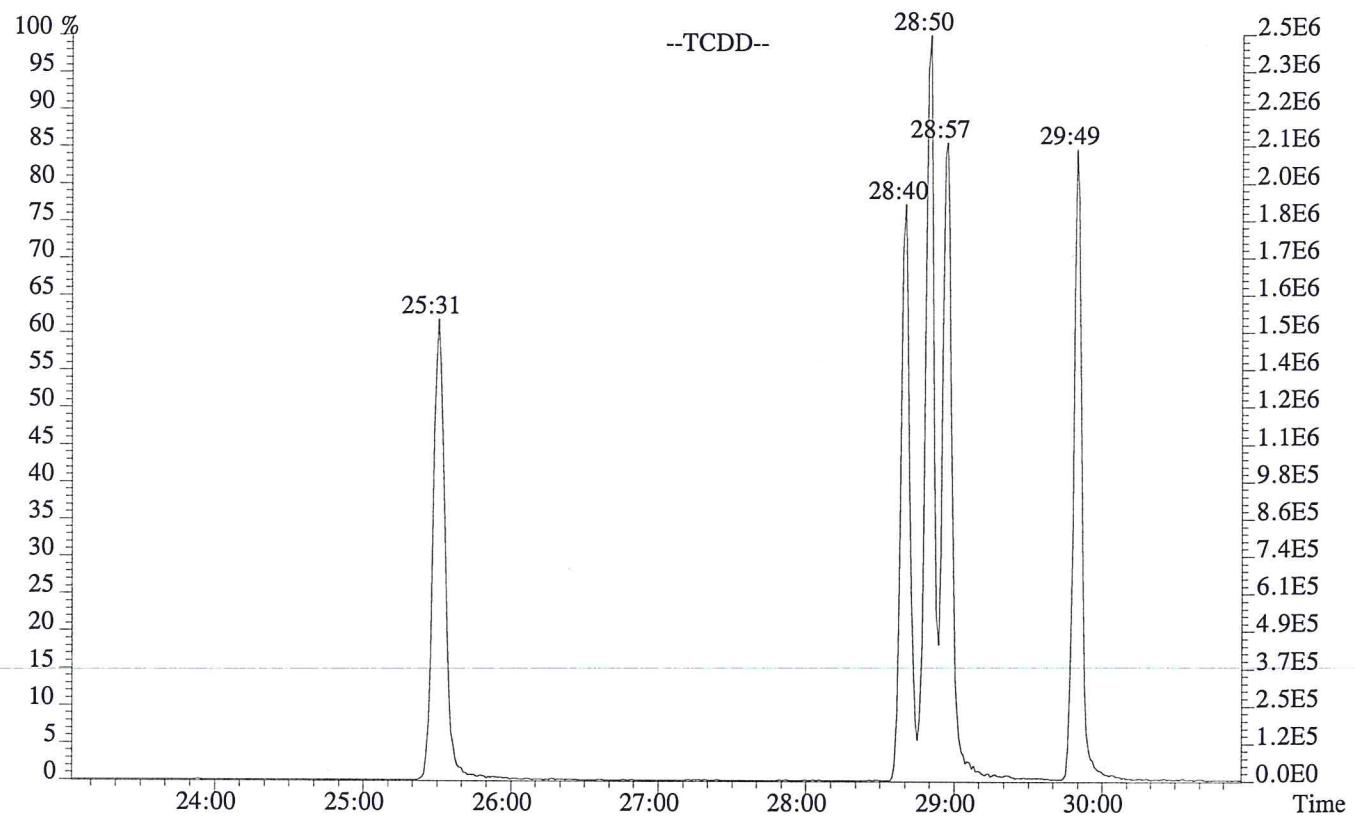
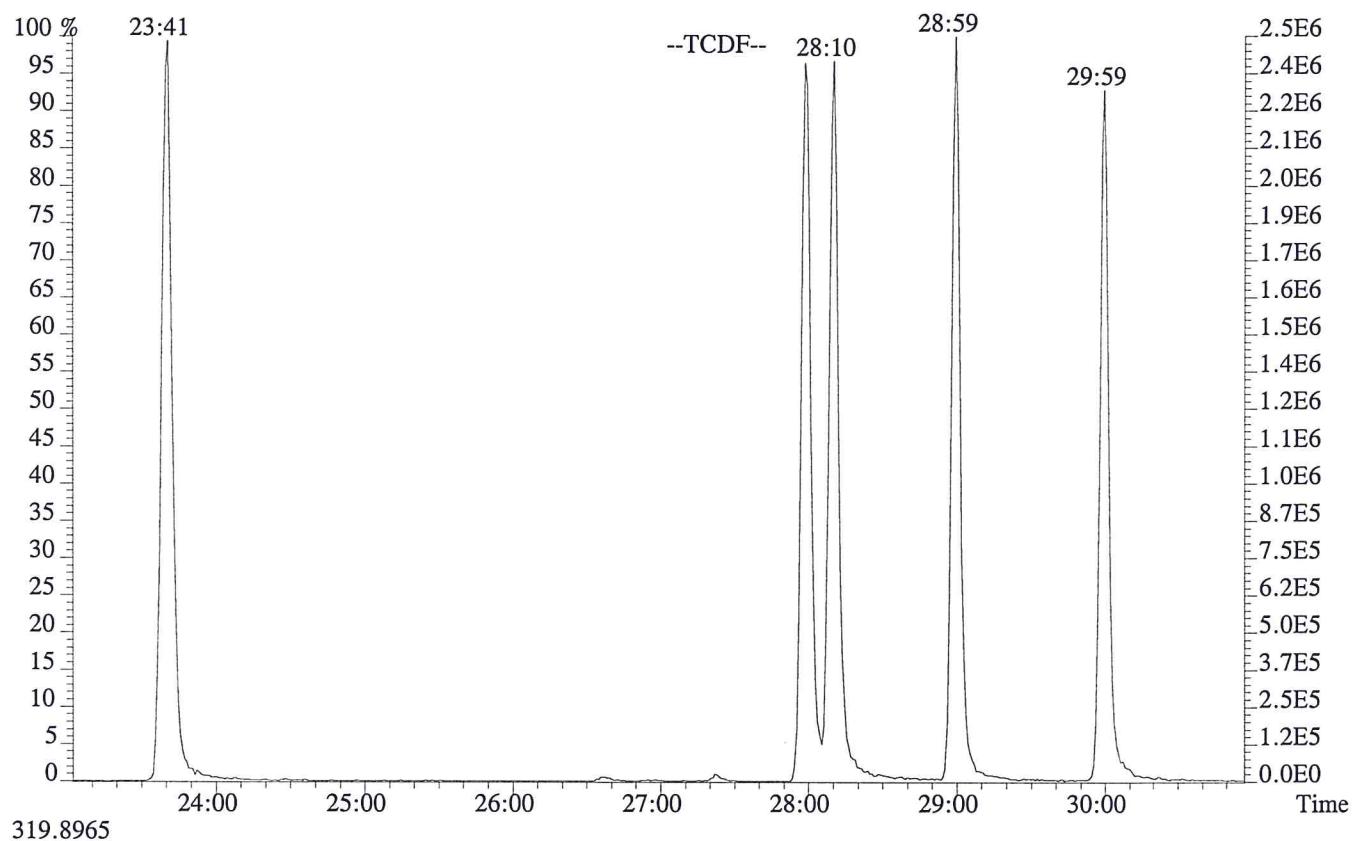
Congener	Retention Time	Retention Time
	First Eluting	Last Eluting
TCDF	23:41	29:59
TCDD	25:31	29:49
PeCDF	29:56	34:11
PeCDD	31:28	33:56
HxCDF	34:50	37:20
HxCDD	35:21	36:55
HpCDF	38:32	39:55
HpCDD	38:47	39:27

% Valley 2378-TCDD: 18 %

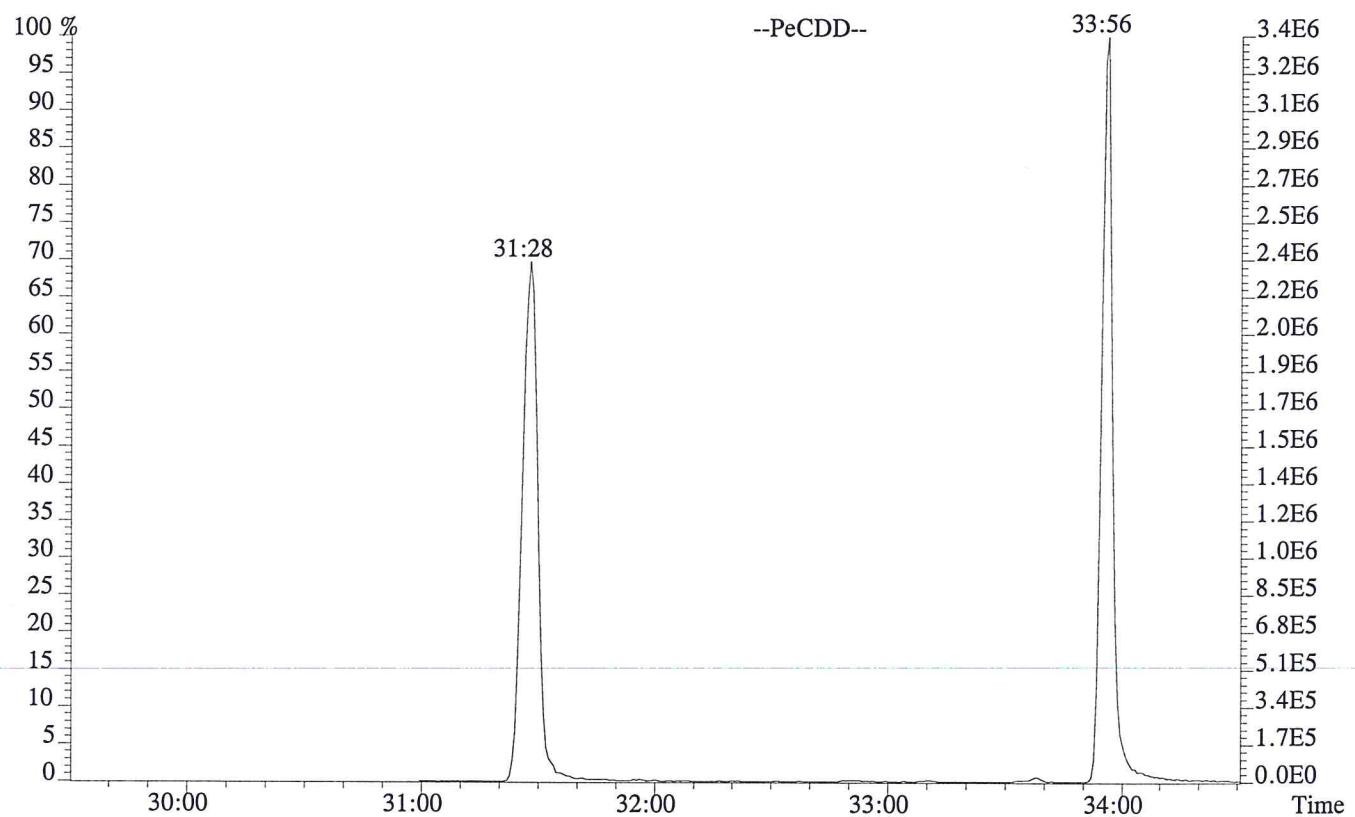
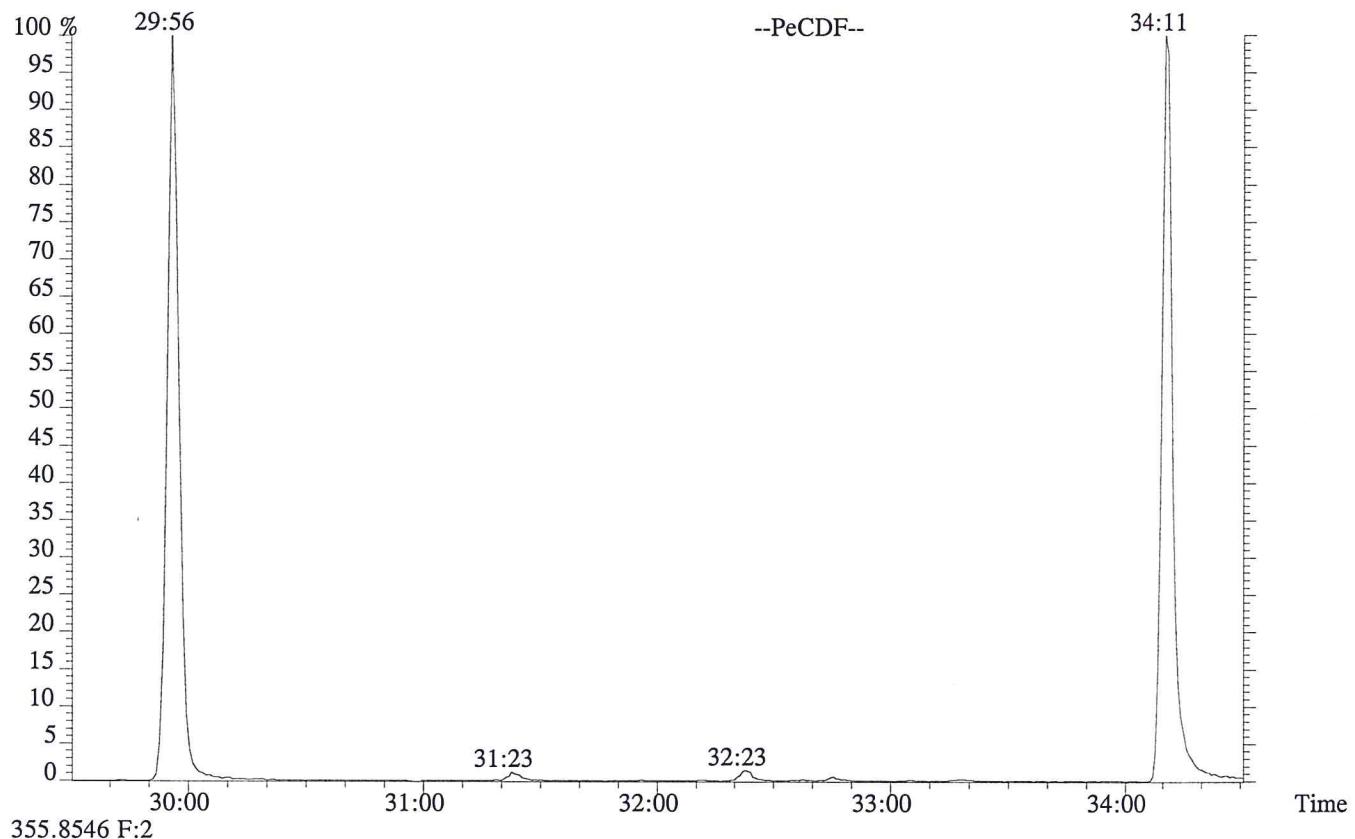
File:P600956 #1-562 Acq:14-OCT-2015 03:46:09 Probe EI+ Magnet SIR VG BioTech Mass spect~~f~~  
Sample#1 Exp:WD  
319.8965



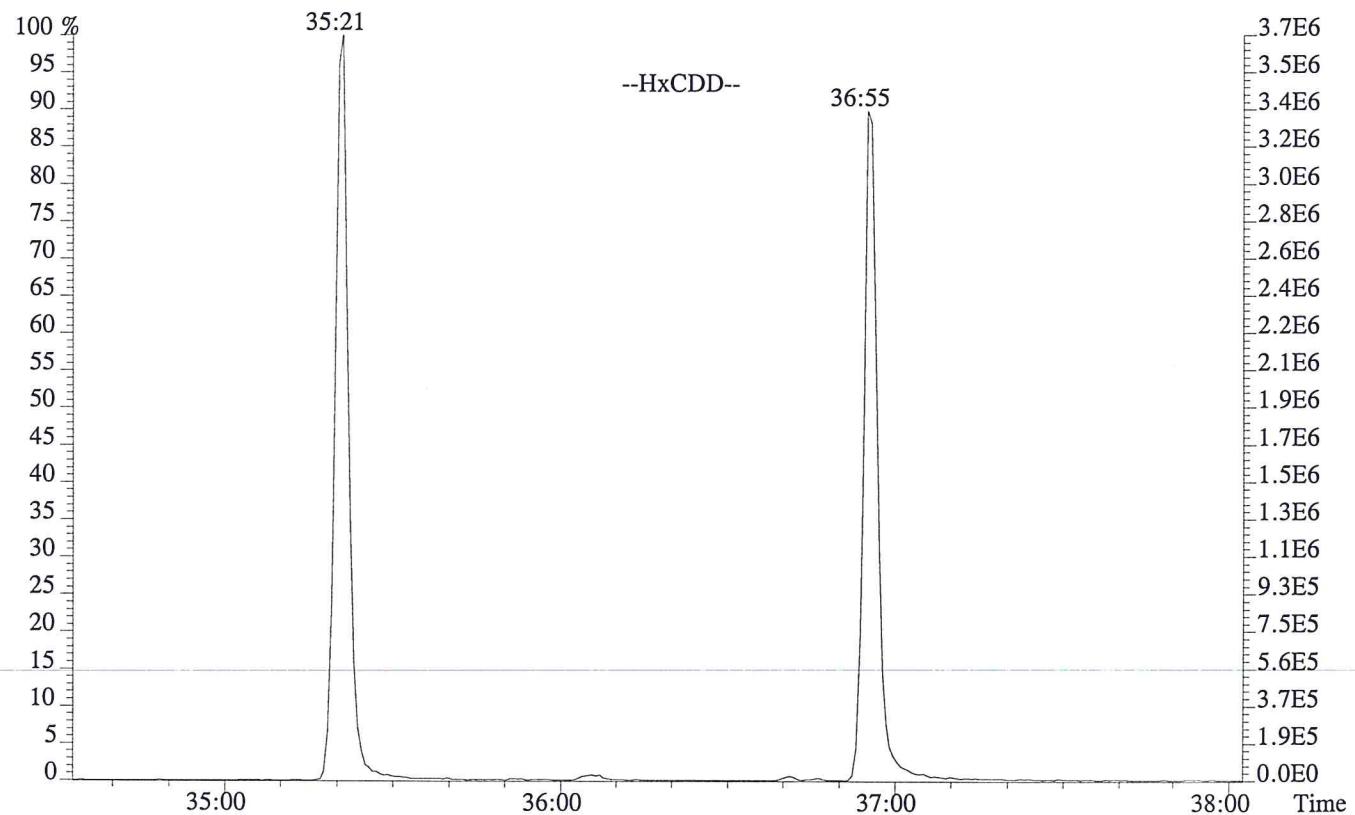
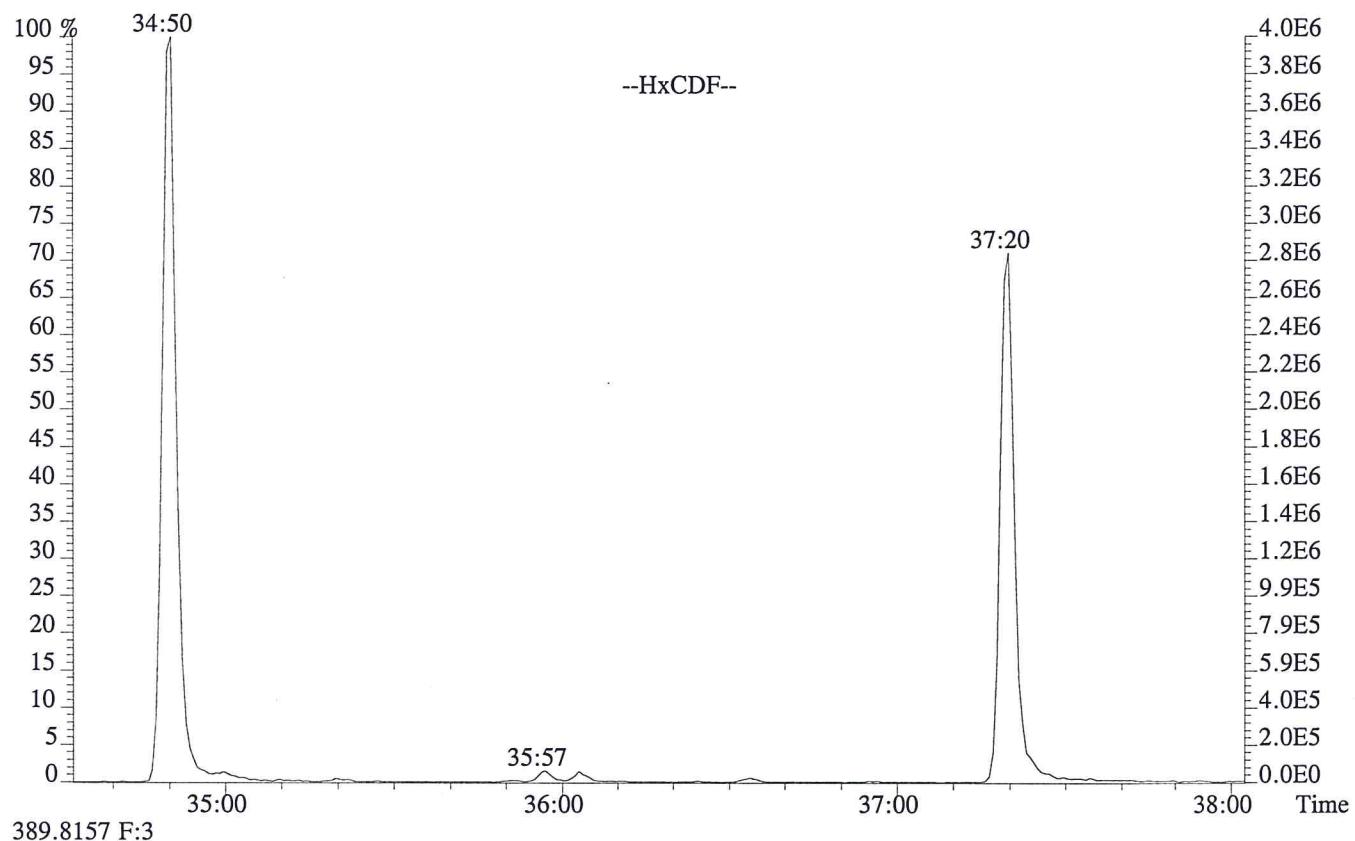
File:P600956 #1-562 Acq:14-OCT-2015 03:46:09 Probe EI+ Magnet SIR VG BioTech Mass spectf  
Sample#1 Exp:WD  
303.9016



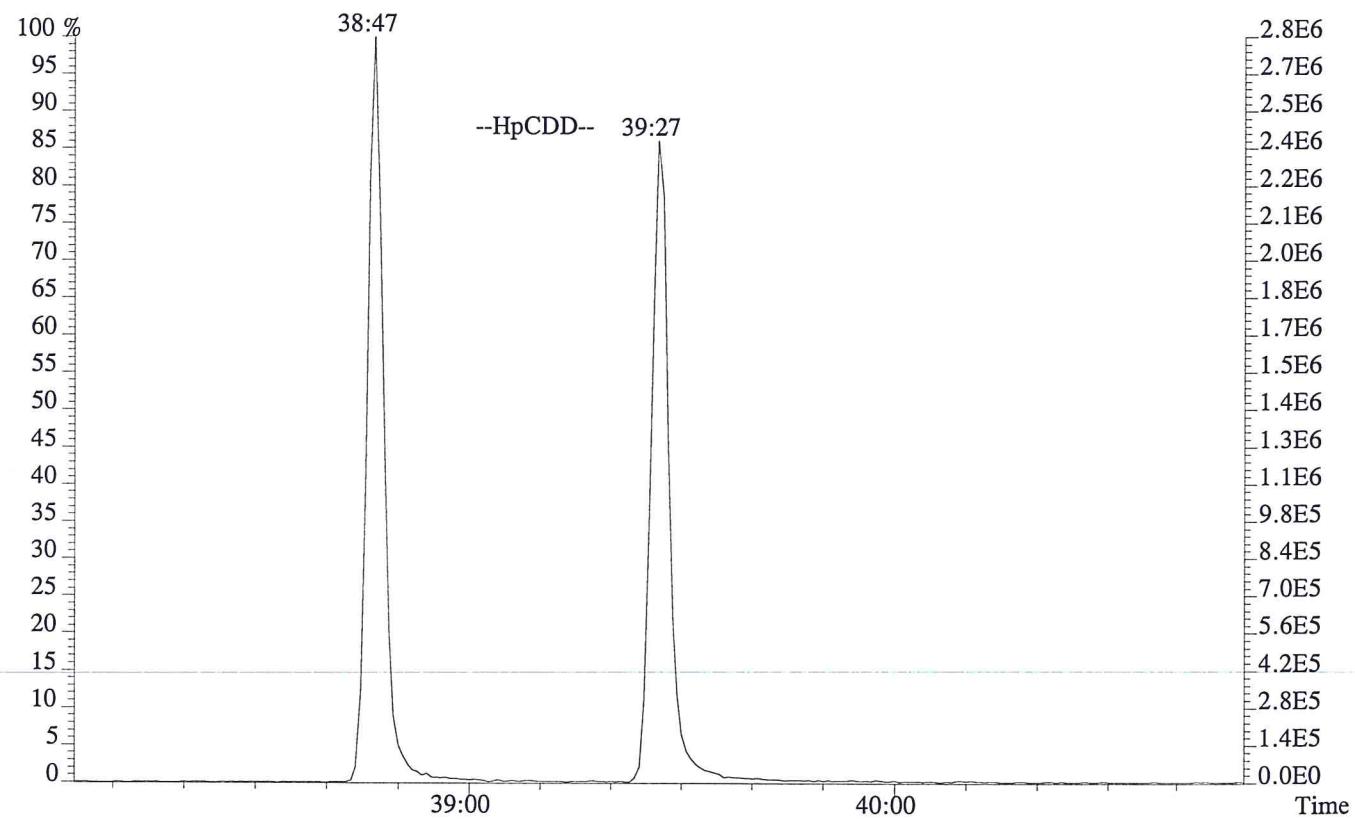
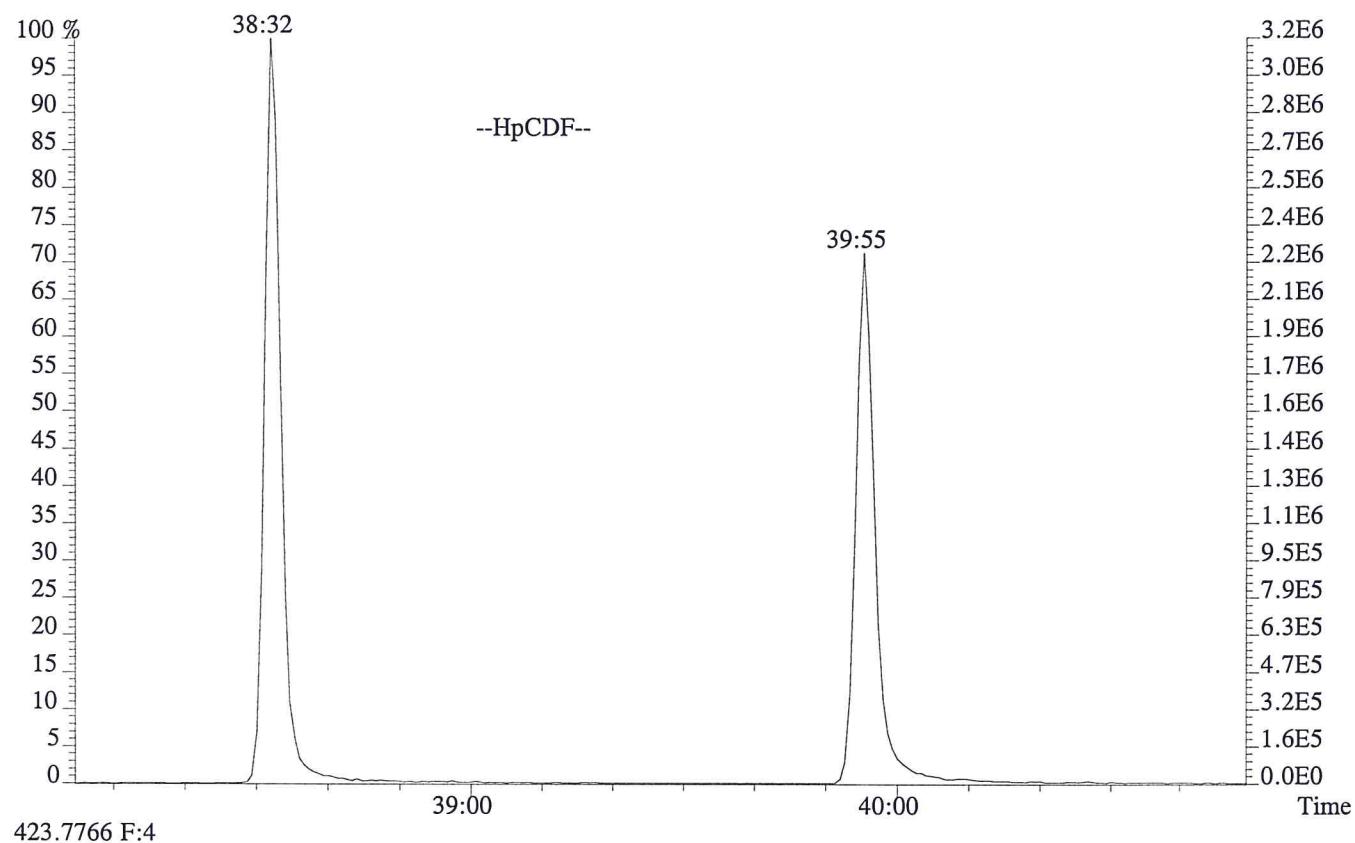
File:P600956 #1-562 Acq:14-OCT-2015 03:46:09 Probe EI+ Magnet SIR VG BioTech Mass spectf  
Sample#1 Exp:WD  
339.8597,339.8597 F:2



File:P600956 #1-315 Acq:14-OCT-2015 03:46:09 Probe EI+ Magnet SIR VG BioTech Mass spectf  
Sample#1 Exp:WD  
373.8208 F:3



File:P600956 #1-248 Acq:14-OCT-2015 03:46:09 Probe EI+ Magnet SIR VG BioTech Mass spectf  
Sample#1 Exp:WD  
407.7818 F:4



## USEPA - ITD

FORM 4A  
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: ALS ENVIRONMENTAL

Episode No.:

Contract No.:

SAS No.:

Initial Calibration Date: 08/19/15

Instrument ID: E-HRMS-08

GC Column ID: DB-5MSUI

VER Data Filename: P600954

Analysis Date: 14-OCT-15 Time: 02:09:16

	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	CONC. FOUND	CONC. RANGE (3) (ng/mL)	%RSD (4)
<b>NATIVE ANALYTES</b>						
2,3,7,8-TCDD	M/M+2	0.77	0.65-0.89	10.1	7.8 - 12.9	1.0
1,2,3,7,8-PeCDD	M+2/M+4	1.55	1.32-1.78	50	39 - 65	-0.5
1,2,3,4,7,8-HxCDD	M+2/M+4	1.31	1.05-1.43	48	39 - 64	-3.1
1,2,3,6,7,8-HxCDD	M+2/M+4	1.19	1.05-1.43	48	39 - 64	-3.1
1,2,3,7,8,9-HxCDD	M+2/M+4	1.22	1.05-1.43	46	41 - 61	-7.6
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.03	0.88-1.20	47	43 - 58	-5.7
OCDD	M+2/M+4	0.88	0.76-1.02	97	79 - 126	-3.5
2,3,7,8-TCDF	M/M+2	0.76	0.65-0.89	9.2	8.4 - 12.0	-7.9
1,2,3,7,8-PeCDF	M+2/M+4	1.54	1.32-1.78	47	41 - 60	-5.5
2,3,4,7,8-PeCDF	M+2/M+4	1.53	1.32-1.78	47	41 - 61	-5.2
1,2,3,4,7,8-HxCDF	M+2/M+4	1.25	1.05-1.43	48	45 - 56	-3.7
1,2,3,6,7,8-HxCDF	M+2/M+4	1.21	1.05-1.43	46	44 - 57	-7.1
1,2,3,7,8,9-HxCDF	M+2/M+4	1.23	1.05-1.43	46	45 - 56	-8.8
2,3,4,6,7,8-HxCDF	M+2/M+4	1.23	1.05-1.43	47	44 - 57	-6.3
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.03	0.88-1.20	46	45 - 55	-7.7
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.03	0.88-1.20	46	43 - 58	-7.8
OCDF	M+2/M+4	0.90	0.76-1.02	90	63 - 159	-10.2

(1) See Table 8, Method 1613B, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613B.

(3) Contract-required concentration range as specified in Table 6, Method 1613B, under VER.

(4) The beginning CCAL %RSD for the 17 unlabeled standard must not exceed +/- 20%, Section 7.7.4.1. The ending CCAL must not exceed +/-25%, Section 8.3.2.4, Method 8290

12/2012  
1613F4A.FRM

## USEPA - ITD

FORM 4B  
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: ALS ENVIRONMENTAL

Episode No.:

Contract No.:

SAS No.:

Initial Calibration Date: 08/19/15

Instrument ID: E-HRMS-08

GC Column ID: DB-5MSUI

VER Data Filename: P600954

Analysis Date: 14-OCT-15 Time: 02:09:16

LABELED COMPOUNDS	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	CONC. FOUND	CONC. RANGE (3) (ng/mL)	%RSD (5)
13C-2,3,7,8-TCDD	M/M+2	0.80	0.65-0.89	82	82 - 121	-17.6
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.58	1.32-1.78	103	62 - 160	3.0
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.33	1.05-1.43	102	85 - 117	1.7
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.20	1.05-1.43	106	85 - 118	6.0
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.04	0.88-1.20	99	72 - 138	-1.5
13C-OCDD	M+2/M+4	0.89	0.76-1.02	228	96 - 415	13.9
13C-2,3,7,8-TCDF	M/M+2	0.78	0.65-0.89	98	71 - 140	-2.4
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.57	1.32-1.78	102	76 - 130	1.7
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.56	1.32-1.78	101	77 - 130	0.6
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.52	0.43-0.59	91	76 - 131	-8.9
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.51	0.43-0.59	97	70 - 143	-2.7
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.51	0.43-0.59	91	74 - 135	-8.6
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.51	0.43-0.59	94	73 - 137	-6.0
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.43	0.37-0.51	92	78 - 129	-8.4
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.44	0.37-0.51	79	77 - 129	-20.8

## CLEANUP STANDARD

37Cl-2,3,7,8-TCDD	8.3	7.8 - 12.7	-16.5
-------------------	-----	------------	-------

- (1) See Table 8, Method 1613B, for m/z specifications.  
 (2) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613B.  
 (3) Contract-required concentration range, as specified in Table 6, Method 1613B, under VER.  
 (4) No ion abundance ratio; report concentration found.  
 (5) The beginning CCAL %RSD for the labeled standard must not exceed +/- 30% Section 7.7.4.2. The ending CCAL must not exceed +/- 35%, Sec 8.3.2.4 (8290)

12/2012  
1613F4B.FRM

ALS ENVIRONMENTAL  
Sample Response Summary

CLIENT ID.  
84080

Run #7      Filename P600954      Samp: 1      Inj: 1      Acquired: 14-OCT-15 02:09:16  
Processed: 21-OCT-15 15:49:51      Sample ID: CS3

Typ	Name	RT-1	Resp 1	Resp 2	Ratio	Meet	Mod?	RRF
1 Unk	2,3,7,8-TCDF	28:10	8.322e+03	1.094e+04	0.76	yes	no	0.941
2 Unk	1,2,3,7,8-PeCDF	32:22	6.921e+04	4.490e+04	1.54	yes	no	0.987
3 Unk	2,3,4,7,8-PeCDF	33:16	6.526e+04	4.260e+04	1.53	yes	no	0.934
4 Unk	1,2,3,4,7,8-HxCDF	35:56	5.776e+04	4.623e+04	1.25	yes	no	1.189
5 Unk	1,2,3,6,7,8-HxCDF	36:02	5.987e+04	4.946e+04	1.21	yes	no	1.126
6 Unk	2,3,4,6,7,8-HxCDF	36:32	5.687e+04	4.637e+04	1.23	yes	no	1.116
7 Unk	1,2,3,7,8,9-HxCDF	37:18	5.056e+04	4.111e+04	1.23	yes	no	1.158
8 Unk	1,2,3,4,6,7,8-HpCDF	38:32	4.809e+04	4.662e+04	1.03	yes	no	1.373
9 Unk	1,2,3,4,7,8,9-HpCDF	39:55	4.041e+04	3.924e+04	1.03	yes	no	1.287
10 Unk	OCDF	42:23	7.230e+04	8.065e+04	0.90	yes	no	1.257
11 Unk	2,3,7,8-TCDD	28:57	7.206e+03	9.374e+03	0.77	yes	no	1.010
12 Unk	1,2,3,7,8-PeCDD	33:33	5.252e+04	3.389e+04	1.55	yes	no	0.932
13 Unk	1,2,3,4,7,8-HxCDD	36:40	4.807e+04	3.681e+04	1.31	yes	no	1.026
14 Unk	1,2,3,6,7,8-HxCDD	36:45	4.539e+04	3.819e+04	1.19	yes	no	1.021
15 Unk	1,2,3,7,8,9-HxCDD	37:00	4.893e+04	4.005e+04	1.22	yes	no	1.133
16 Unk	1,2,3,4,6,7,8-HpCDD	39:26	4.025e+04	3.922e+04	1.03	yes	no	1.034
17 Unk	OCDD	42:11	6.802e+04	7.722e+04	0.88	yes	no	1.111
18 IS	13C-2,3,7,8-TCDF	28:09	9.783e+04	1.247e+05	0.78	yes	no	1.379
19 IS	13C-1,2,3,7,8-PeCDF	32:21	1.494e+05	9.530e+04	1.57	yes	no	1.456
20 IS	13C-2,3,4,7,8-PeCDF	33:15	1.486e+05	9.506e+04	1.56	yes	no	1.465
21 IS	13C-1,2,3,4,7,8-HxCDF	35:56	6.176e+04	1.198e+05	0.52	yes	no	1.075
22 IS	13C-1,2,3,6,7,8-HxCDF	36:02	7.081e+04	1.382e+05	0.51	yes	no	1.158
23 IS	13C-2,3,4,6,7,8-HxCDF	36:32	6.709e+04	1.305e+05	0.51	yes	no	1.133
24 IS	13C-1,2,3,7,8,9-HxCDF	37:17	5.899e+04	1.145e+05	0.51	yes	no	1.024
25 IS	13C-1,2,3,4,6,7,8-HpCDF	38:31	4.519e+04	1.042e+05	0.43	yes	no	0.880
26 IS	13C-1,2,3,4,7,8,9-HpCDF	39:54	4.083e+04	9.342e+04	0.44	yes	no	0.914
27 IS	13C-2,3,7,8-TCDD	28:55	7.223e+04	9.027e+04	0.80	yes	no	1.193
28 IS	13C-1,2,3,7,8-PeCDD	33:32	1.142e+05	7.215e+04	1.58	yes	no	1.094
29 IS	13C-1,2,3,4,7,8-HxCDD	36:40	9.745e+04	7.340e+04	1.33	yes	no	0.906
30 IS	13C-1,2,3,6,7,8-HxCDD	36:44	9.205e+04	7.695e+04	1.20	yes	no	0.860
31 IS	13C-1,2,3,4,6,7,8-HpCDD	39:25	8.325e+04	7.983e+04	1.04	yes	no	0.892
32 IS	13C-OCDD	42:10	1.280e+05	1.431e+05	0.89	yes	no	0.642
33 RS/RT	13C-1,2,3,4-TCDD	28:21	7.355e+04	9.178e+04	0.80	yes	no	-
34 RS/RT	13C-1,2,3,7,8,9-HxCDD	36:59	1.026e+05	8.283e+04	1.24	yes	no	-
35 C/Up	37Cl-2,3,7,8-TCDD	28:57	1.743e+04				no	1.263

---

ALS ENVIRONMENTAL  
10450 Stancliff Rd, Suite 115  
Houston, TX 77099  
Office (713) 266-1599. Fax (713) 266-0130

ALS ENVIRONMENTAL  
Signal/Noise Height Ratio Summary

CLIENT ID.  
84080

Run #7   Filename P600954              Samp: 1    Inj: 1              Acquired: 14-OCT-15 02:09:16  
Processed: 21-OCT-15 15:49:51              LAB. ID: CS3

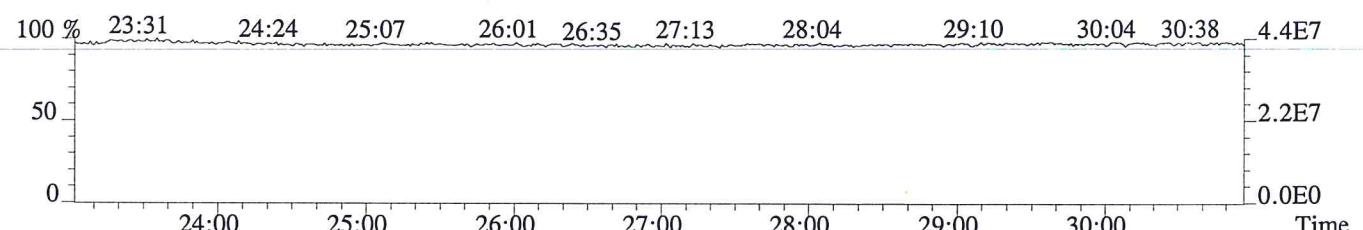
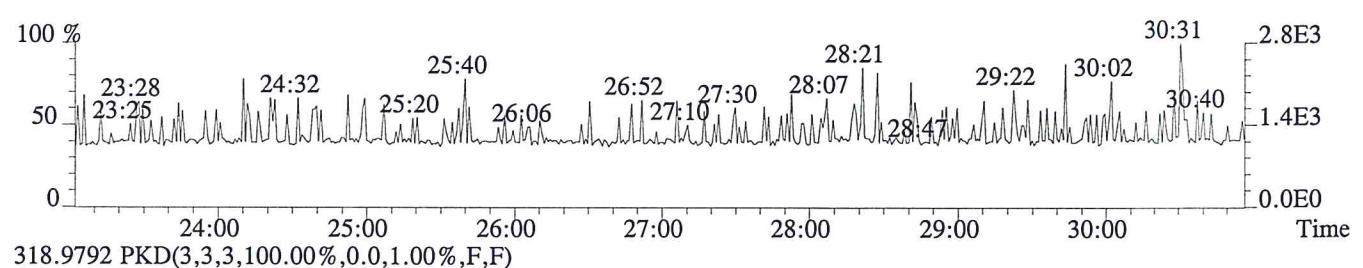
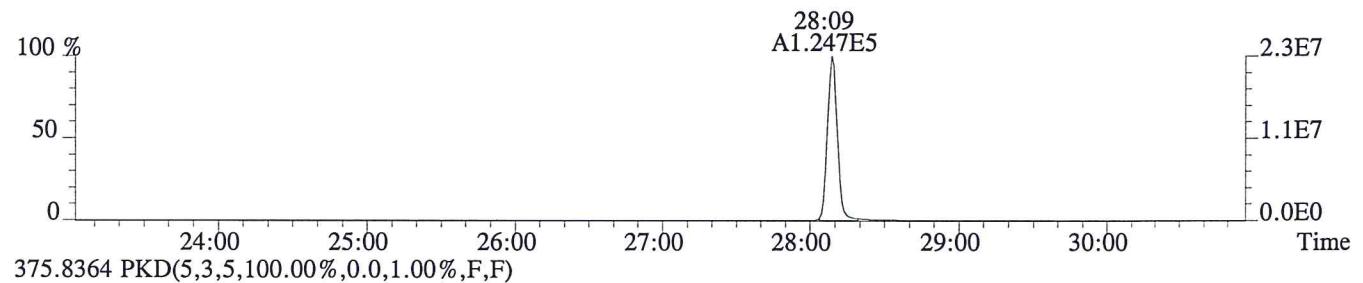
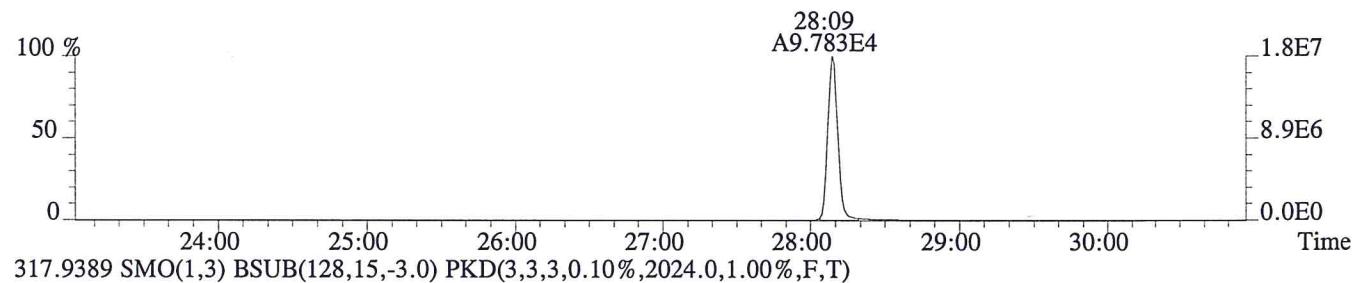
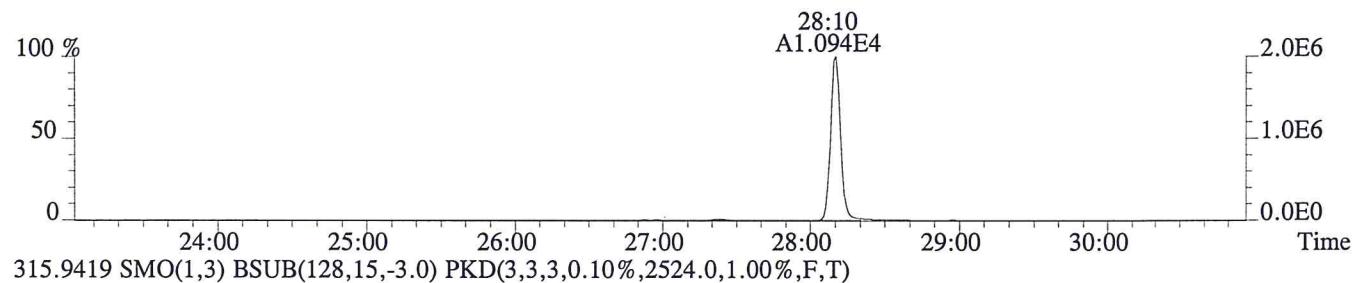
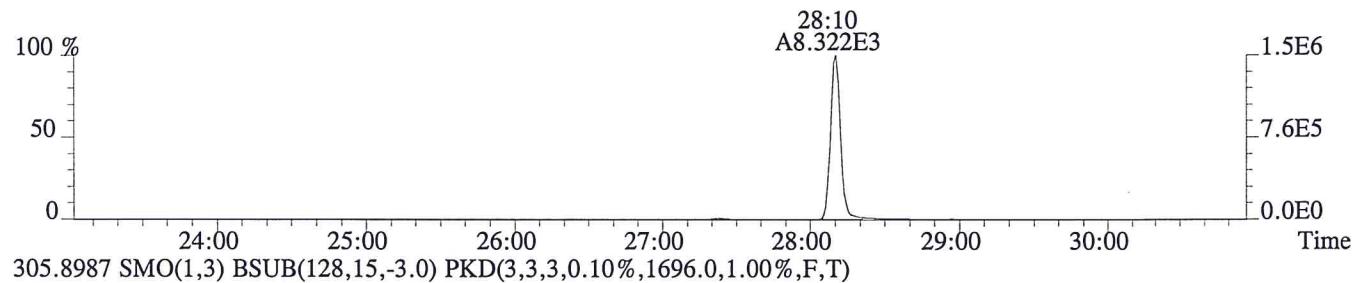
	Name	Signal 1	Noise 1	S/N Rat.1	Signal 2	Noise 2	S/N Rat.2
--	------	----------	---------	-----------	----------	---------	-----------

1	2,3,7,8-TCDF	1.51e+06	1.02e+03	1.5e+03	1.99e+06	1.70e+03	1.2e+03
2	1,2,3,7,8-PeCDF	1.32e+07	7.52e+02	1.8e+04	8.52e+06	1.70e+03	5.0e+03
3	2,3,4,7,8-PeCDF	1.31e+07	7.52e+02	1.7e+04	8.63e+06	1.70e+03	5.1e+03
4	1,2,3,4,7,8-HxCDF	1.25e+07	5.32e+02	2.4e+04	1.01e+07	3.48e+02	2.9e+04
5	1,2,3,6,7,8-HxCDF	1.29e+07	5.32e+02	2.4e+04	1.06e+07	3.48e+02	3.0e+04
6	2,3,4,6,7,8-HxCDF	1.27e+07	5.32e+02	2.4e+04	1.04e+07	3.48e+02	3.0e+04
7	1,2,3,7,8,9-HxCDF	1.05e+07	5.32e+02	2.0e+04	8.55e+06	3.48e+02	2.5e+04
8	1,2,3,4,6,7,8-HpCDF	1.09e+07	1.00e+03	1.1e+04	1.05e+07	5.21e+03	2.0e+03
9	1,2,3,4,7,8,9-HpCDF	8.32e+06	1.00e+03	8.3e+03	8.09e+06	5.21e+03	1.6e+03
10	OCDF	1.34e+07	6.72e+02	2.0e+04	1.46e+07	1.01e+03	1.4e+04
11	2,3,7,8-TCDD	1.41e+06	8.24e+02	1.7e+03	1.83e+06	9.92e+02	1.8e+03
12	1,2,3,7,8-PeCDD	1.05e+07	1.38e+03	7.6e+03	6.79e+06	6.96e+02	9.8e+03
13	1,2,3,4,7,8-HxCDD	1.09e+07	8.80e+02	1.2e+04	8.61e+06	8.20e+02	1.0e+04
14	1,2,3,6,7,8-HxCDD	1.01e+07	8.80e+02	1.1e+04	8.24e+06	8.20e+02	1.0e+04
15	1,2,3,7,8,9-HxCDD	1.10e+07	8.80e+02	1.3e+04	8.95e+06	8.20e+02	1.1e+04
16	1,2,3,4,6,7,8-HpCDD	8.54e+06	8.80e+02	9.7e+03	8.35e+06	9.04e+02	9.2e+03
17	OCDD	1.30e+07	8.36e+02	1.6e+04	1.47e+07	8.08e+02	1.8e+04
18	13C-2,3,7,8-TCDF	1.77e+07	2.52e+03	7.0e+03	2.27e+07	2.02e+03	1.1e+04
19	13C-1,2,3,7,8-PeCDF	2.82e+07	1.06e+03	2.7e+04	1.78e+07	1.73e+03	1.0e+04
20	13C-2,3,4,7,8-PeCDF	3.00e+07	1.06e+03	2.8e+04	1.92e+07	1.73e+03	1.1e+04
21	13C-1,2,3,4,7,8-HxCDF	1.37e+07	8.36e+02	1.6e+04	2.62e+07	1.46e+03	1.8e+04
22	13C-1,2,3,6,7,8-HxCDF	1.53e+07	8.36e+02	1.8e+04	3.02e+07	1.46e+03	2.1e+04
23	13C-2,3,4,6,7,8-HxCDF	1.50e+07	8.36e+02	1.8e+04	2.92e+07	1.46e+03	2.0e+04
24	13C-1,2,3,7,8,9-HxCDF	1.24e+07	8.36e+02	1.5e+04	2.40e+07	1.46e+03	1.6e+04
25	13C-1,2,3,4,6,7,8-HpCDF	1.03e+07	5.00e+03	2.1e+03	2.37e+07	1.27e+03	1.9e+04
26	13C-1,2,3,4,7,8,9-HpCDF	8.55e+06	5.00e+03	1.7e+03	1.94e+07	1.27e+03	1.5e+04
27	13C-2,3,7,8-TCDD	1.38e+07	3.87e+03	3.6e+03	1.73e+07	2.18e+03	7.9e+03
28	13C-1,2,3,7,8-PeCDD	2.30e+07	1.07e+03	2.1e+04	1.46e+07	8.00e+02	1.8e+04
29	13C-1,2,3,4,7,8-HxCDD	2.20e+07	2.59e+03	8.5e+03	1.72e+07	1.46e+03	1.2e+04
30	13C-1,2,3,6,7,8-HxCDD	2.08e+07	2.59e+03	8.0e+03	1.67e+07	1.46e+03	1.1e+04
31	13C-1,2,3,4,6,7,8-HpCDD	1.78e+07	1.33e+03	1.3e+04	1.73e+07	5.84e+02	3.0e+04
32	13C-OCDD	2.45e+07	6.20e+02	4.0e+04	2.72e+07	8.52e+02	3.2e+04
33	13C-1,2,3,4-TCDD	1.40e+07	3.87e+03	3.6e+03	1.75e+07	2.18e+03	8.1e+03
34	13C-1,2,3,7,8,9-HxCDD	2.33e+07	2.59e+03	9.0e+03	1.87e+07	1.46e+03	1.3e+04
35	37Cl-2,3,7,8-TCDD	3.40e+06	1.89e+03	1.8e+03			

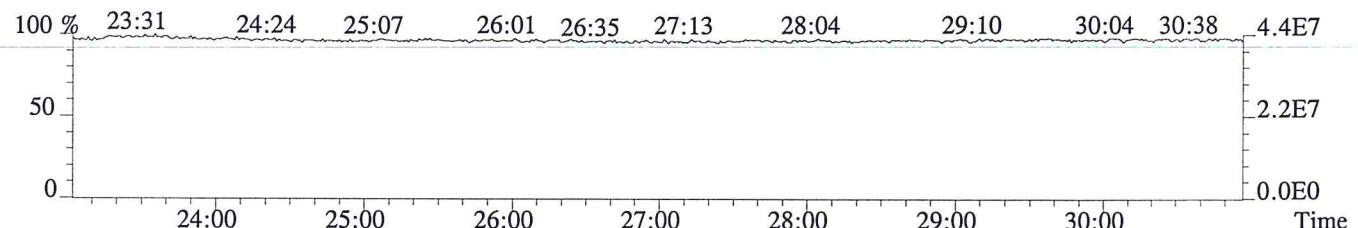
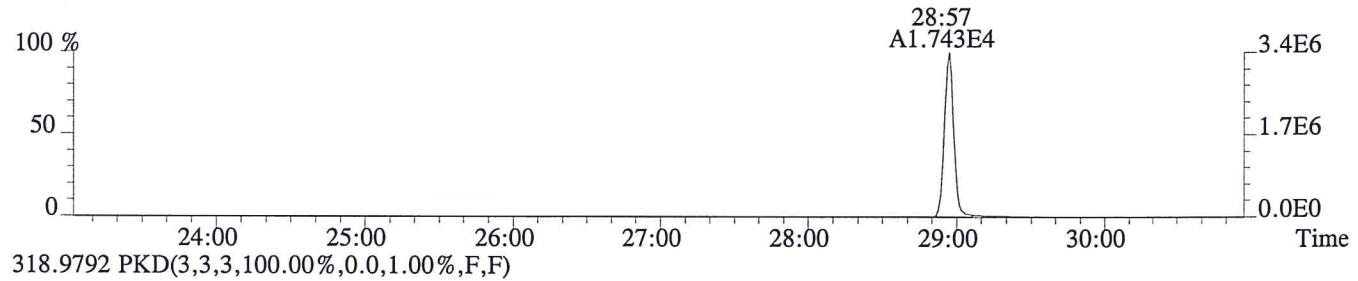
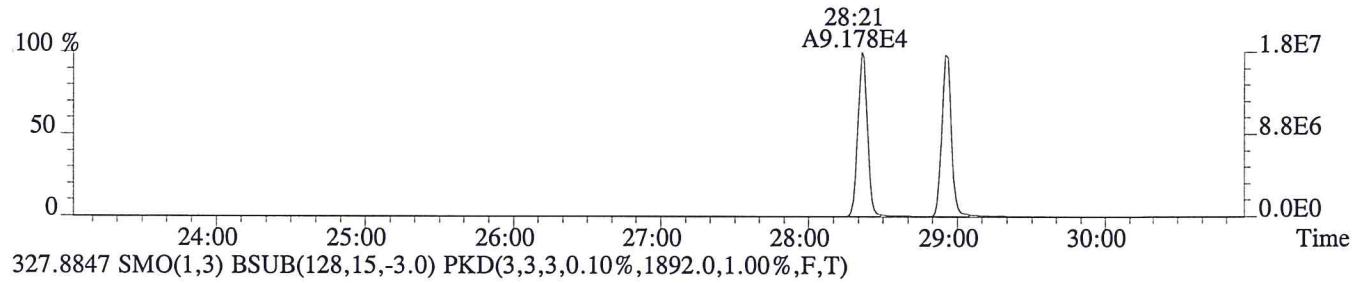
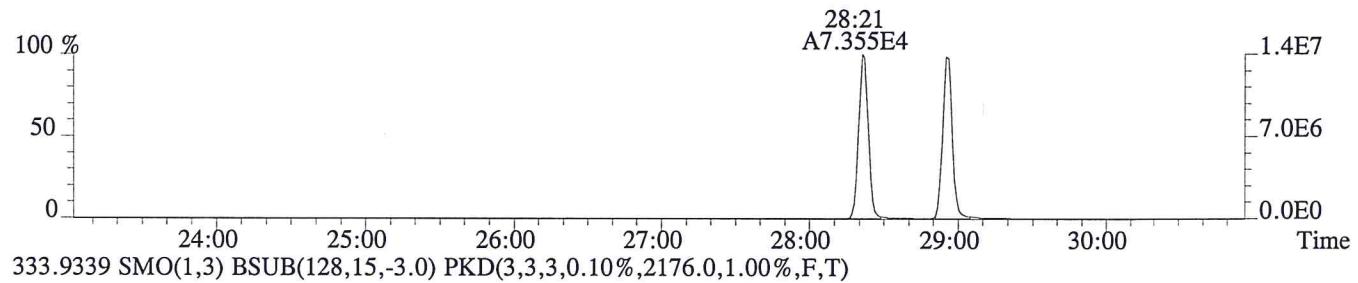
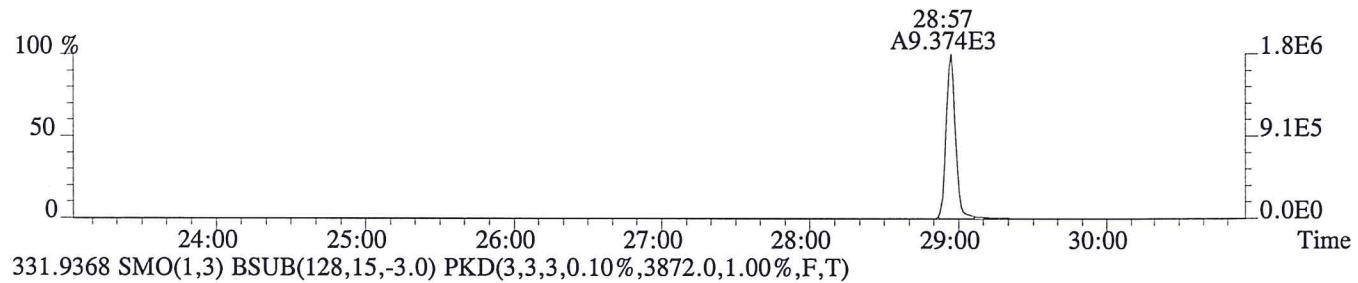
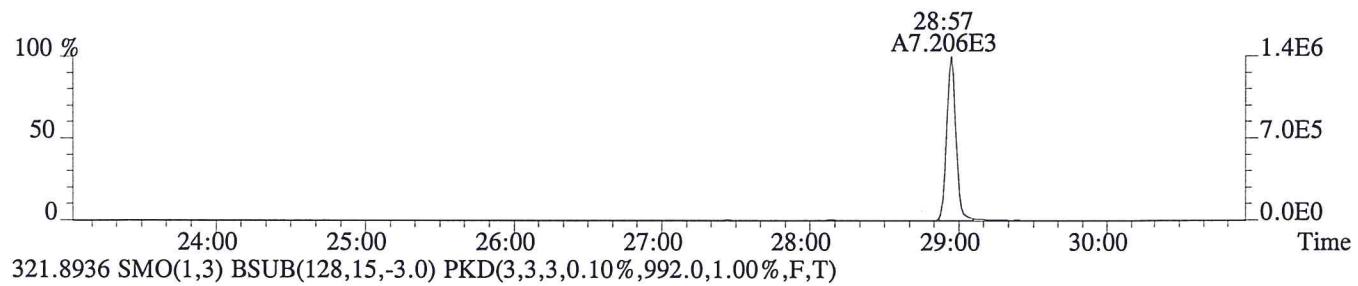
---

ALS ENVIRONMENTAL  
10450 Stancliff Rd., Suite 115  
Houston, TX 77099  
Office: (713) 266-1599. Fax: (713) 266-0130

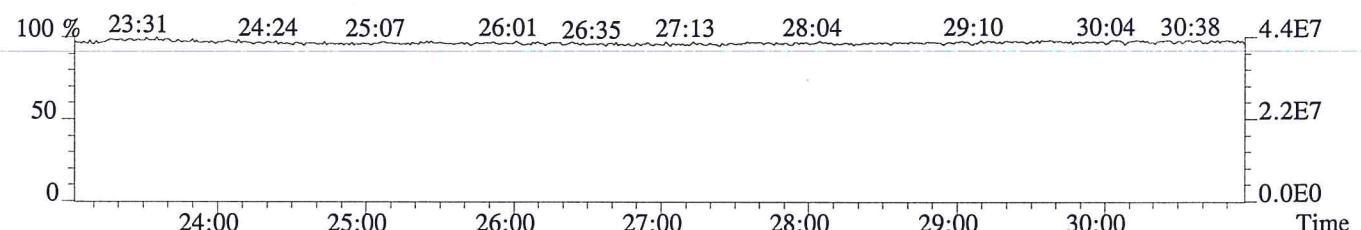
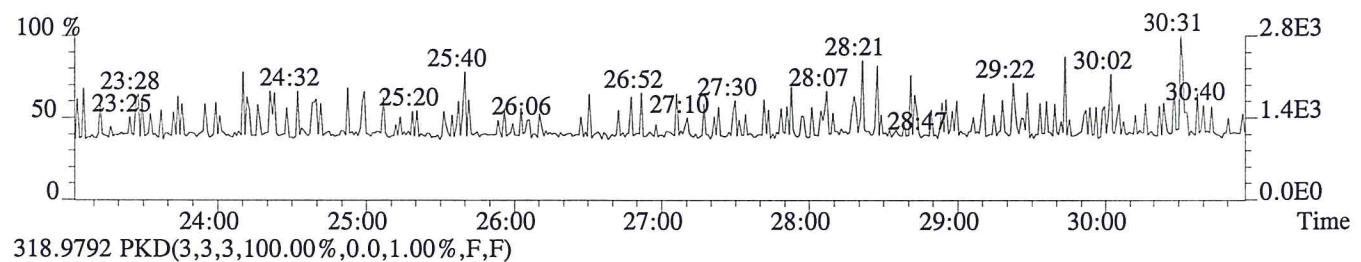
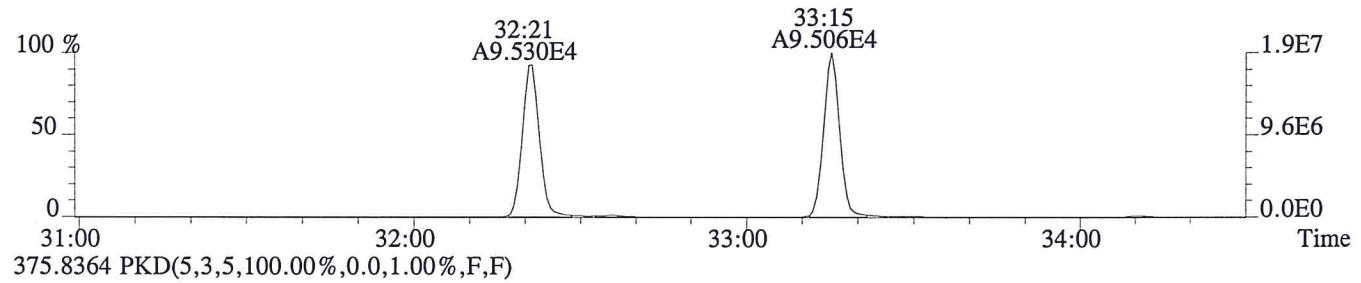
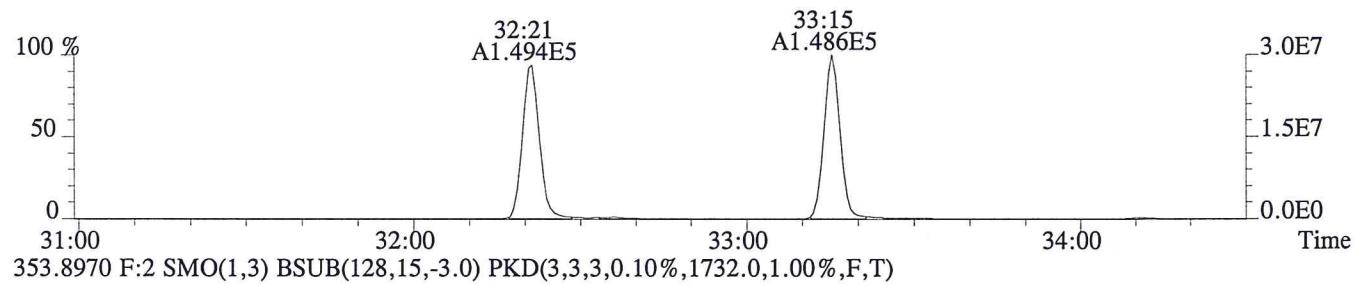
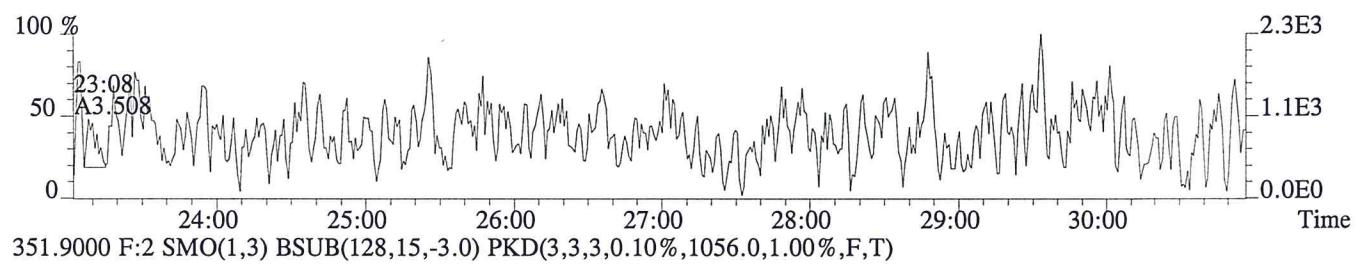
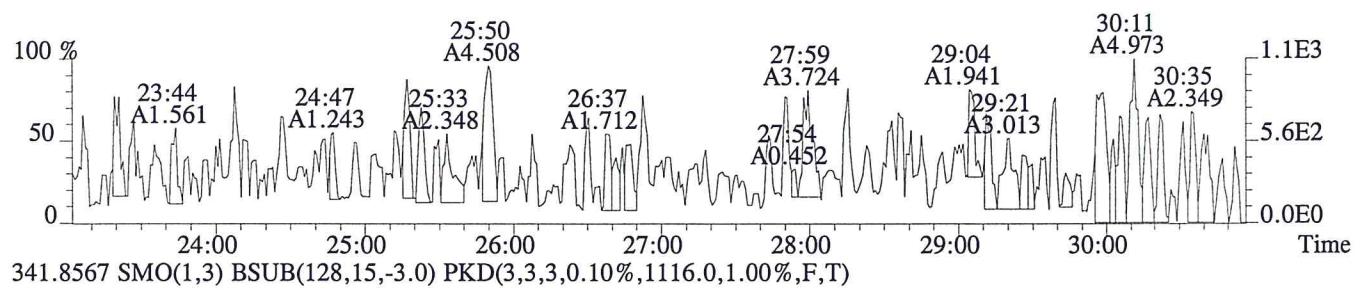
File:P600954 #1-562 Acq:14-OCT-2015 02:09:16 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:CS3  
 303.9016 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1020.0,1.00%,F,T)



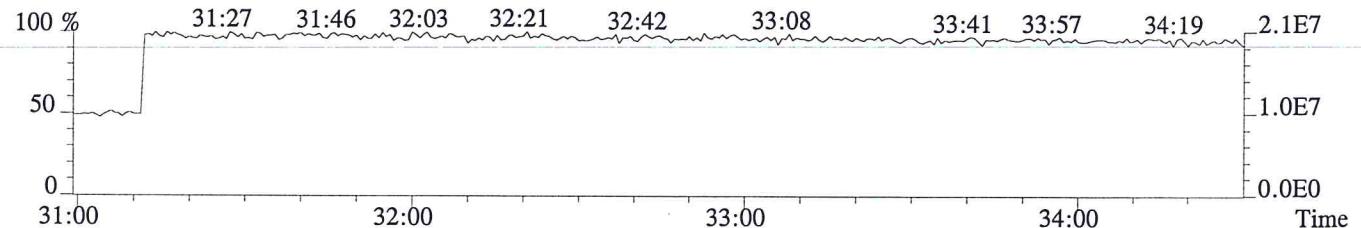
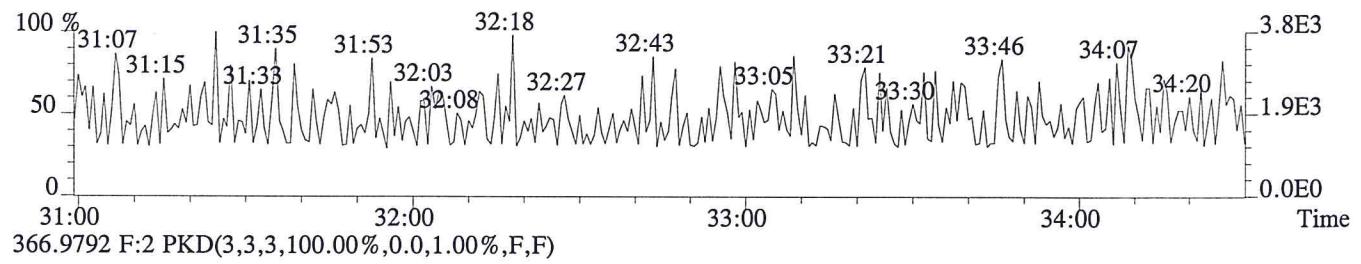
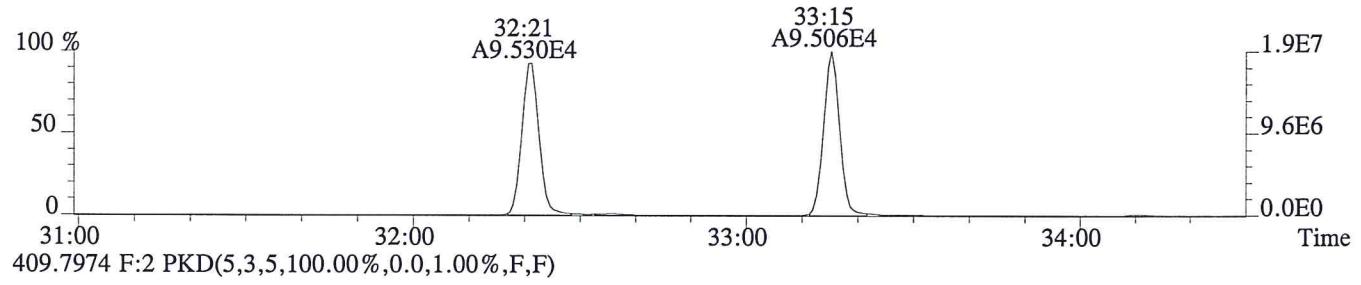
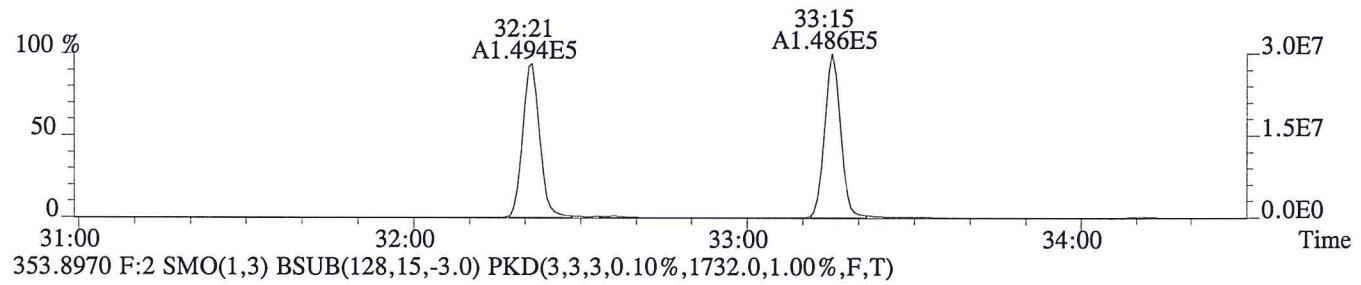
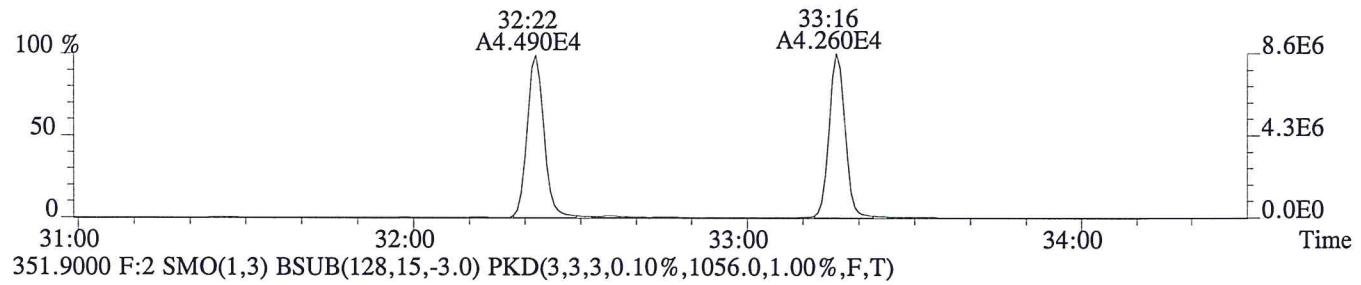
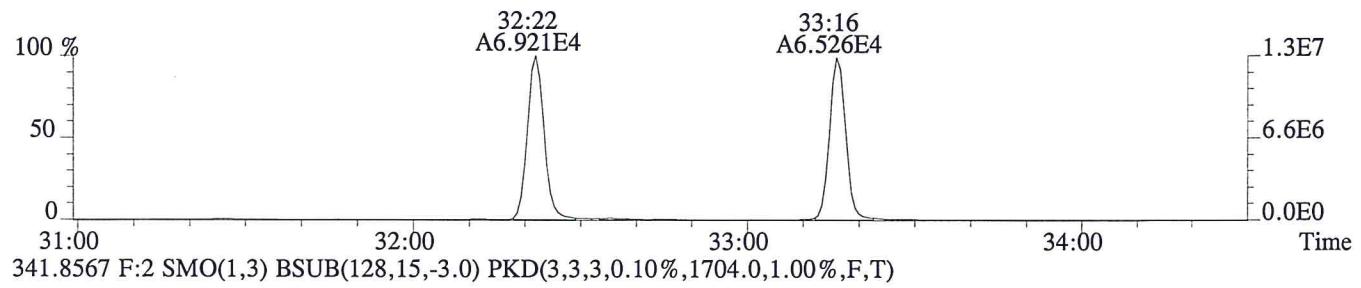
File:P600954 #1-562 Acq:14-OCT-2015 02:09:16 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:CS3  
 319.8965 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,824.0,1.00%,F,T)



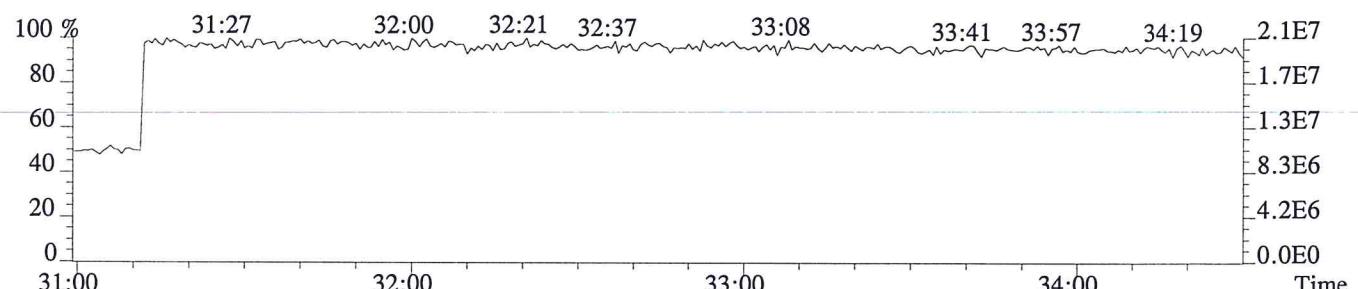
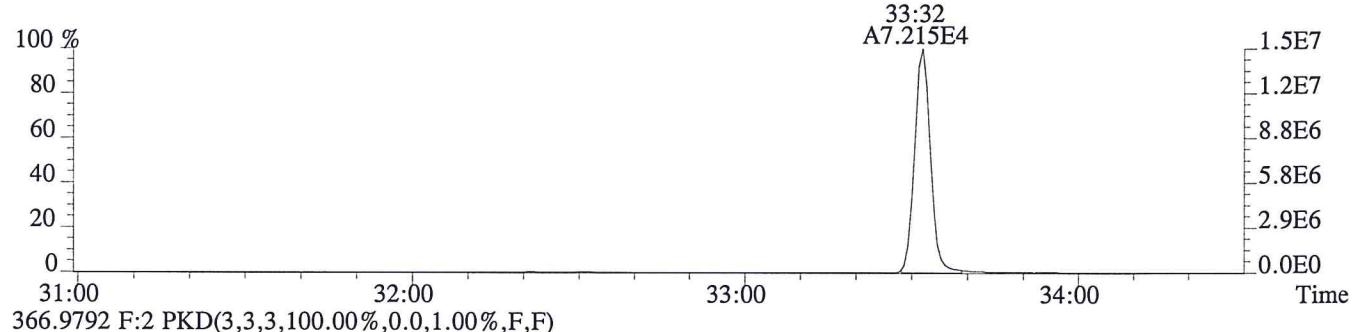
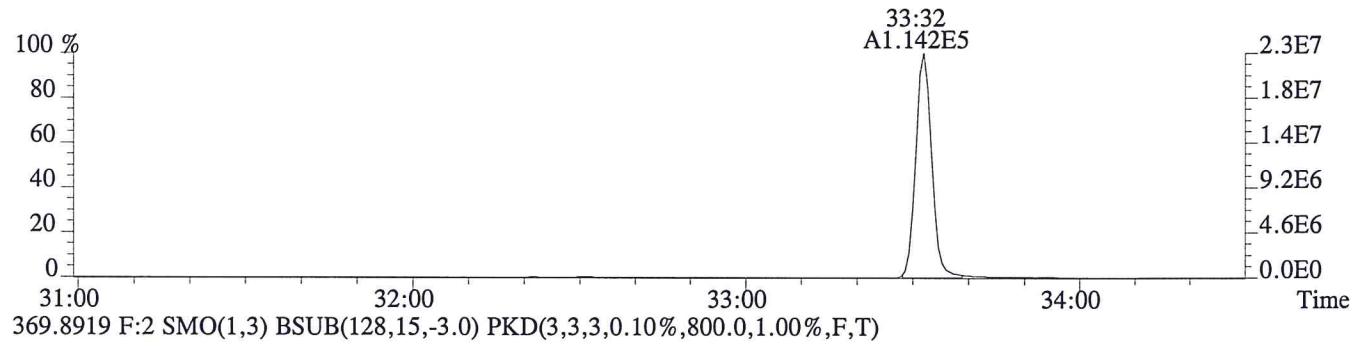
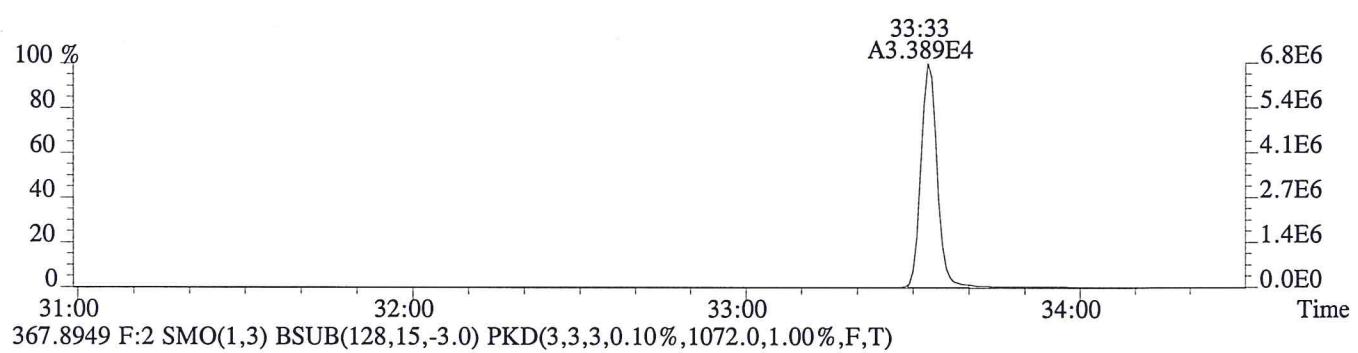
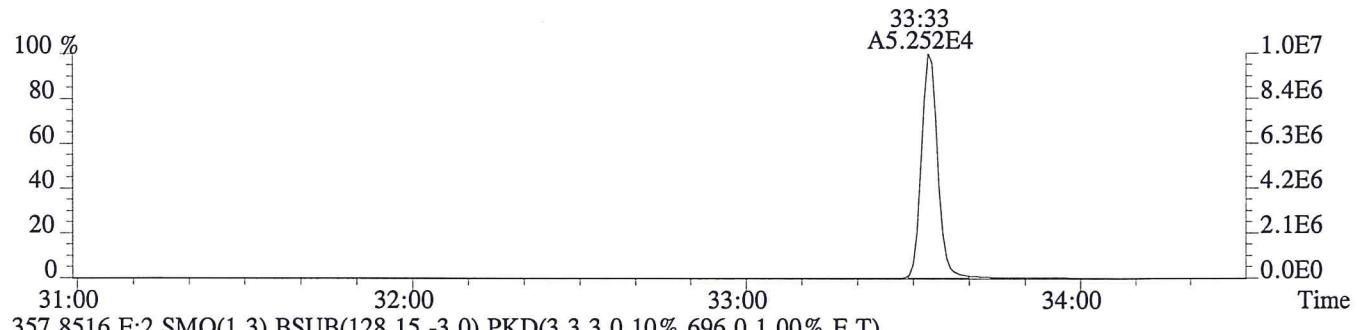
File:P600954 #1-562 Acq:14-OCT-2015 02:09:16 Probe EI+ Magnet SIR VG BioTech Mass spect<br/>Sample#1 Exp:CS3  
339.8597 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,360.0,1.00%,F,T)



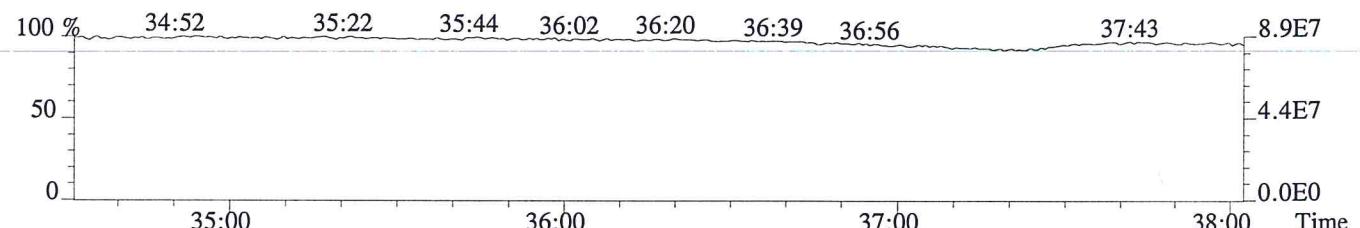
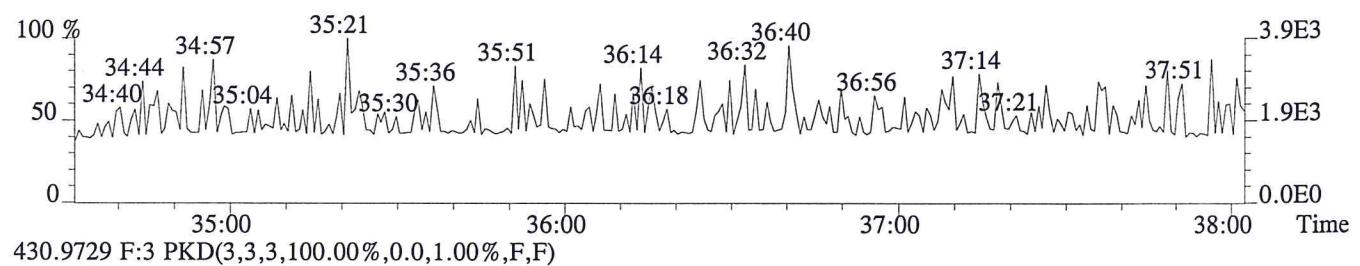
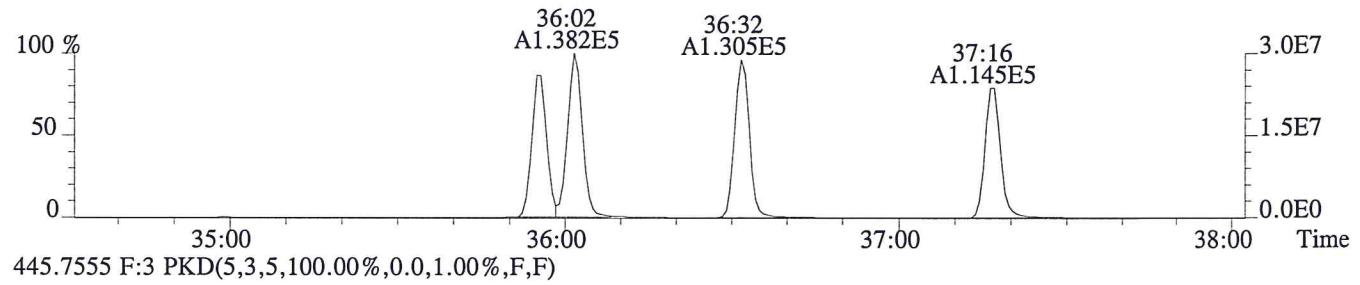
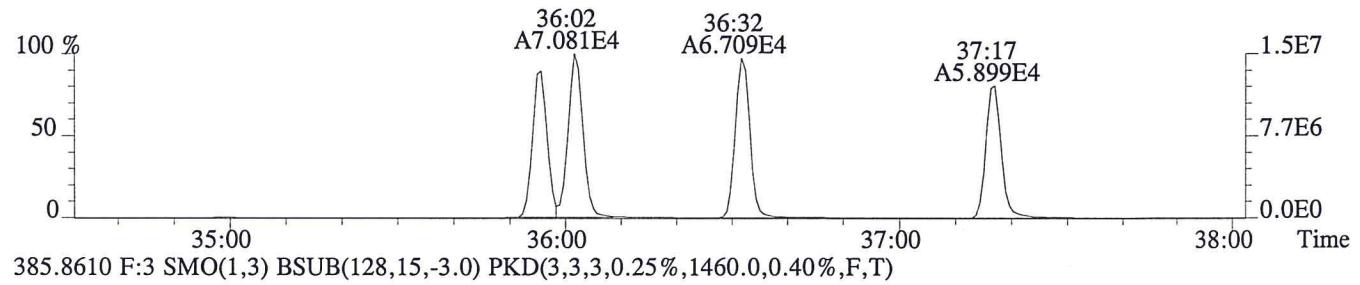
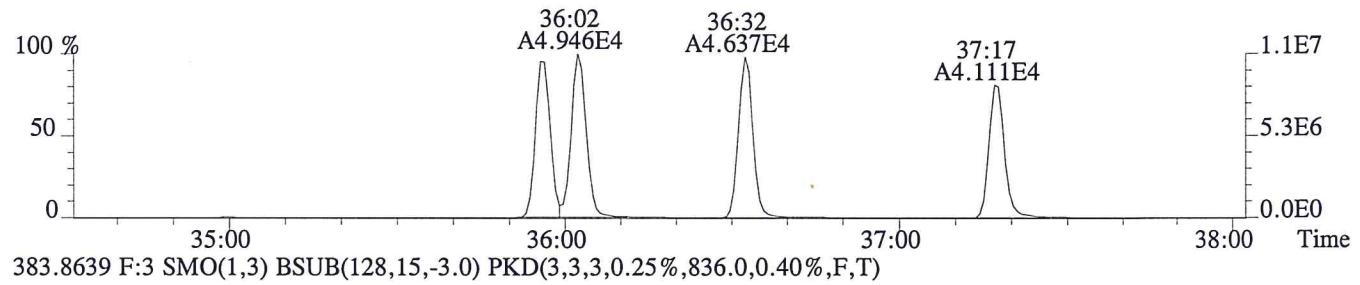
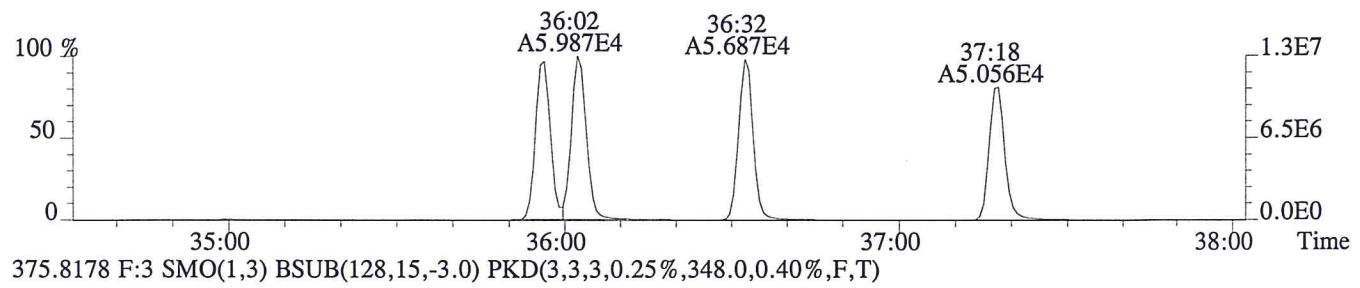
File:P600954 #1-317 Acq:14-OCT-2015 02:09:16 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:CS3  
 339.8597 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,752.0,1.00%,F,T)



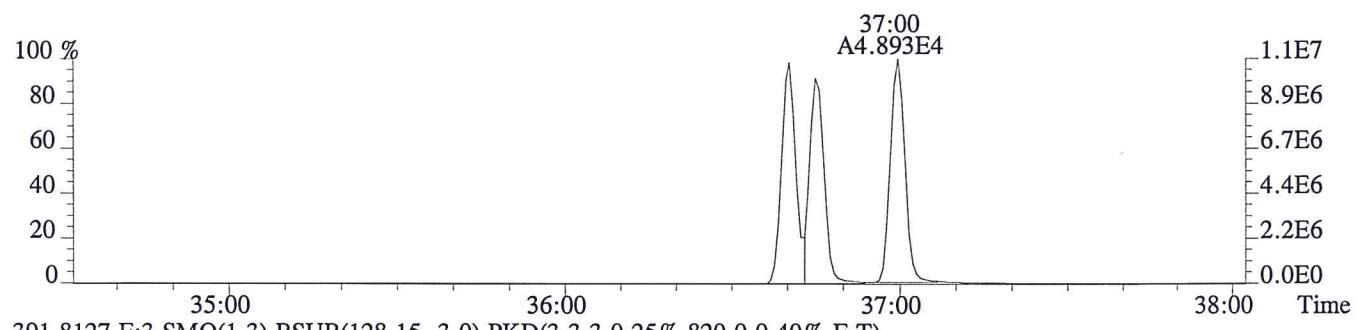
File:P600954 #1-317 Acq:14-OCT-2015 02:09:16 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:CS3  
 355.8546 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1384.0,1.00%,F,T)



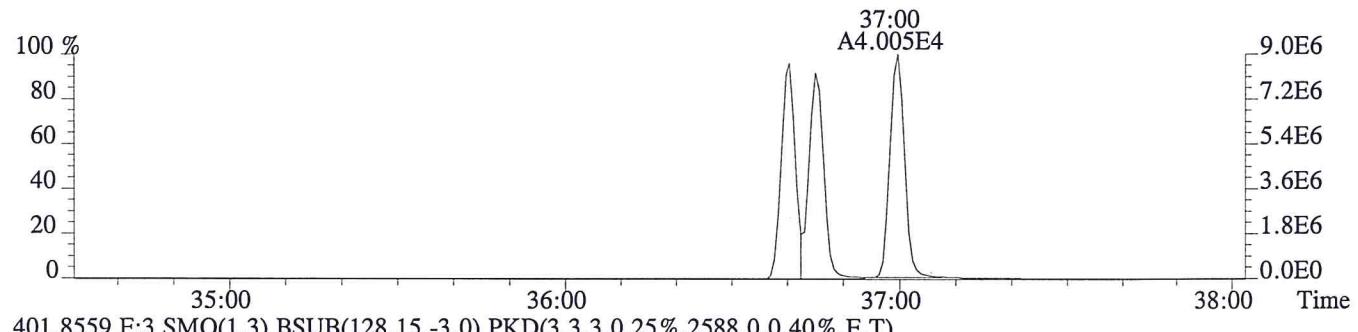
File:P600954 #1-316 Acq:14-OCT-2015 02:09:16 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:CS3  
 373.8208 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,532.0,0.40%,F,T)



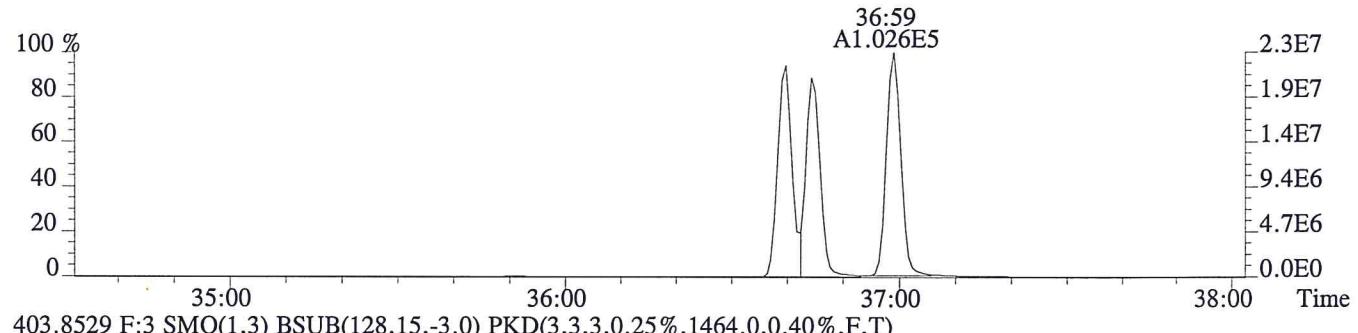
File:P600954 #1-316 Acq:14-OCT-2015 02:09:16 Probe EI+ Magnet SIR VG BioTech Mass spect<br/>Sample#1 Exp:CS3  
389.8157 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,880.0,0.40%,F,T)



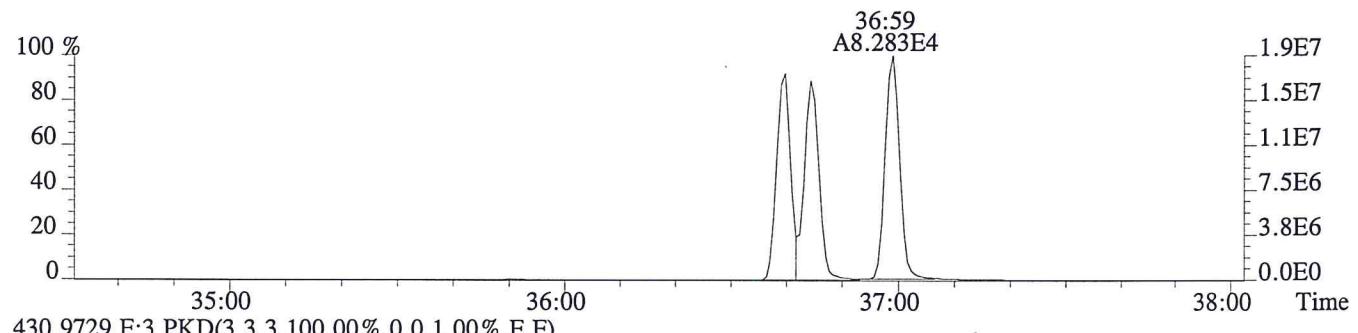
391.8127 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,820.0,0.40%,F,T)



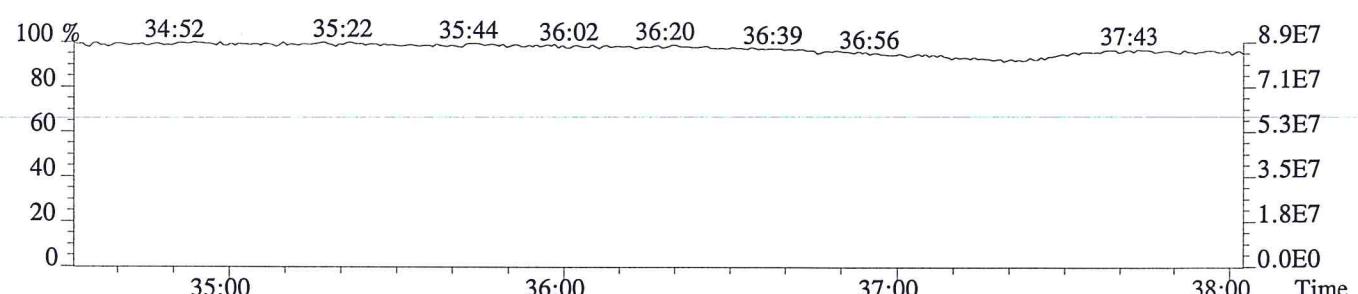
401.8559 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,2588.0,0.40%,F,T)



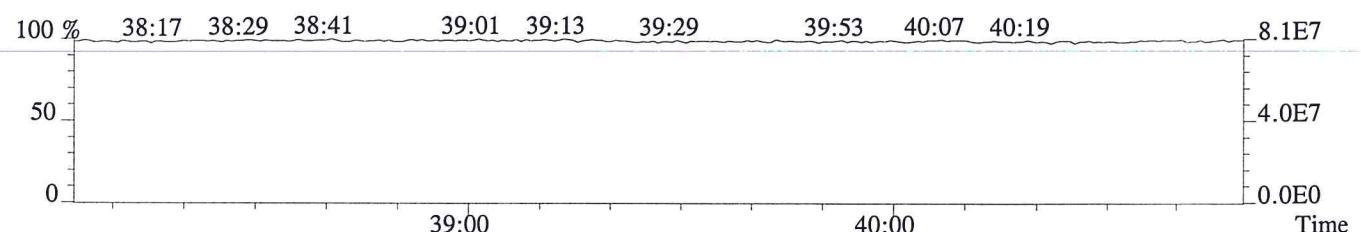
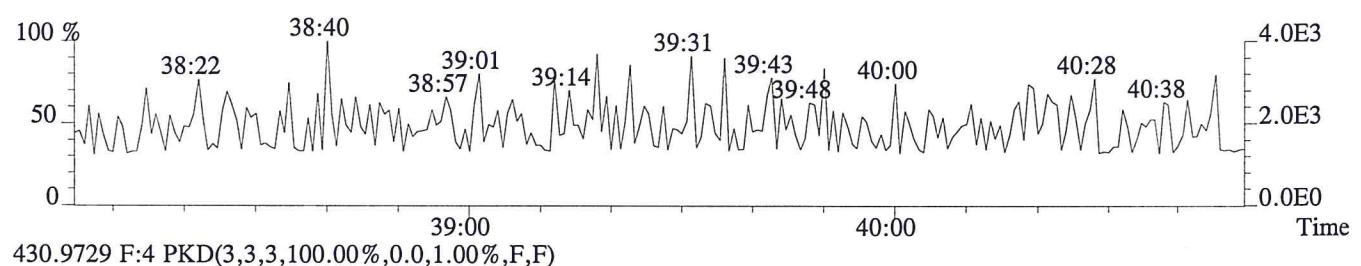
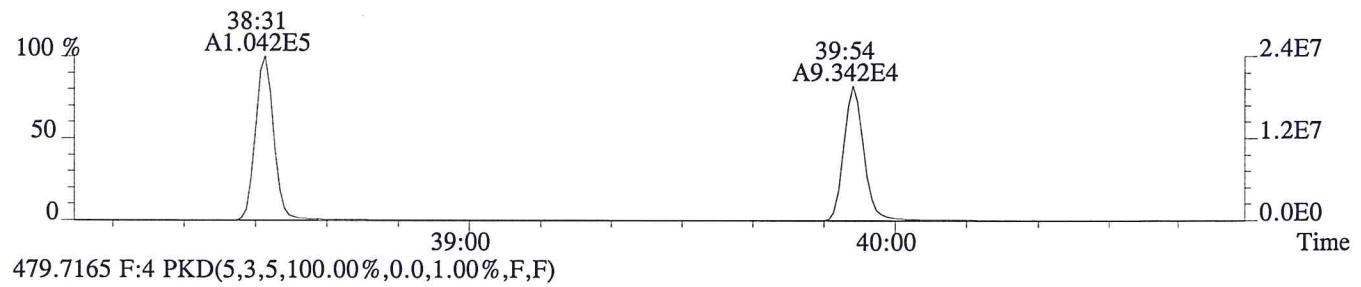
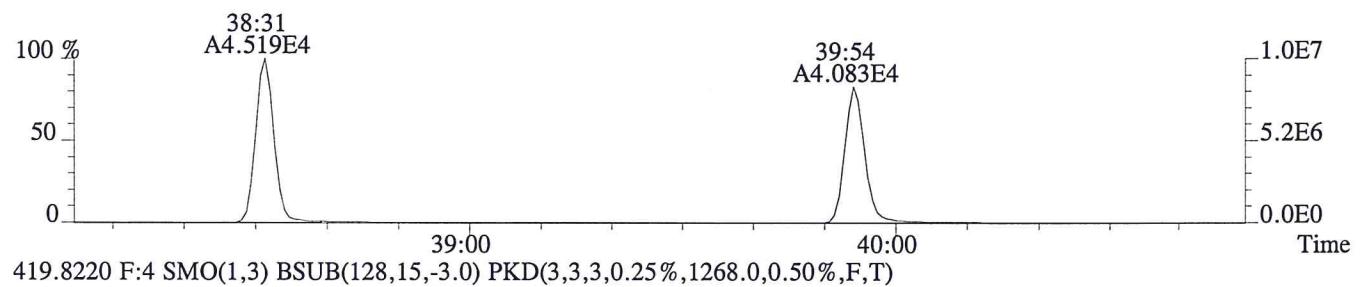
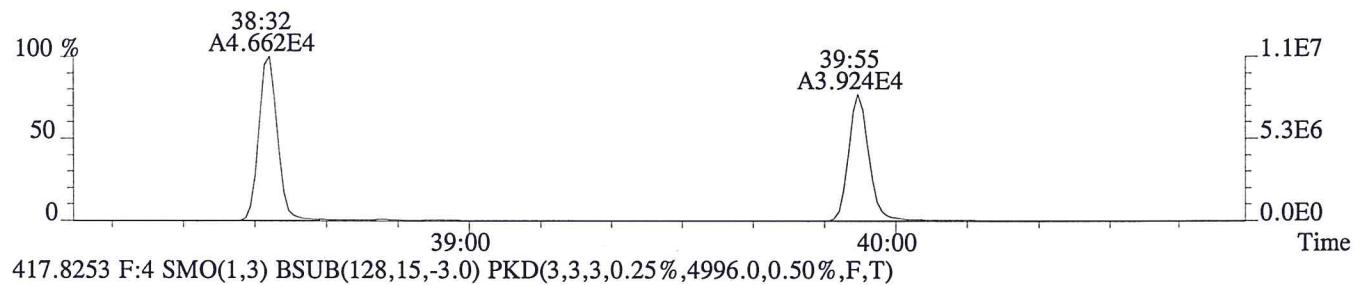
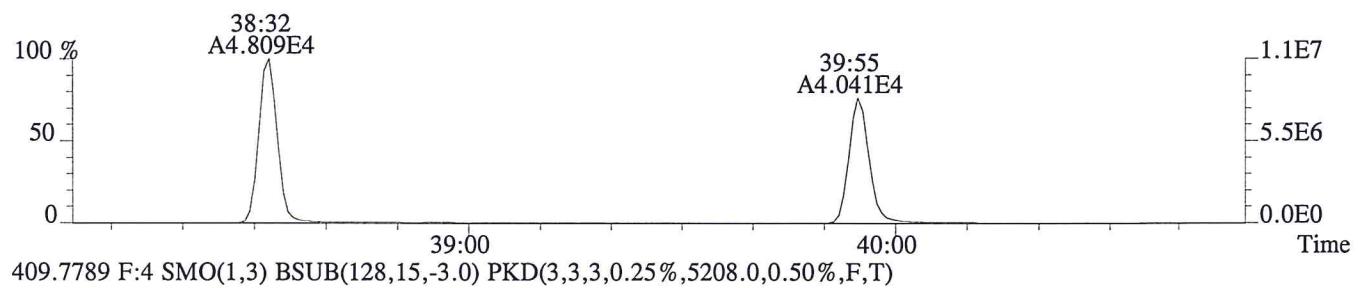
403.8529 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1464.0,0.40%,F,T)



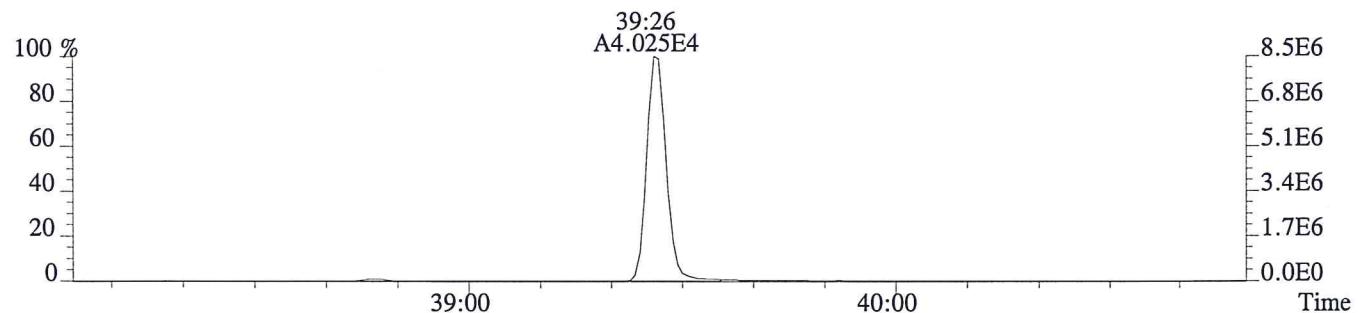
430.9729 F:3 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



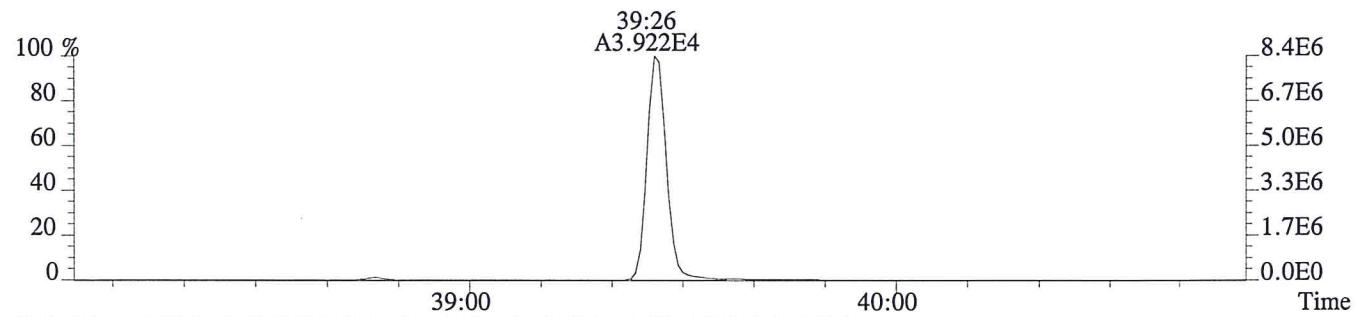
File:P600954 #1-248 Acq:14-OCT-2015 02:09:16 Probe EI+ Magnet SIR VG BioTech Mass spect<br/>Sample#1 Exp:CS3  
407.7818 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1004.0,0.50%,F,T)



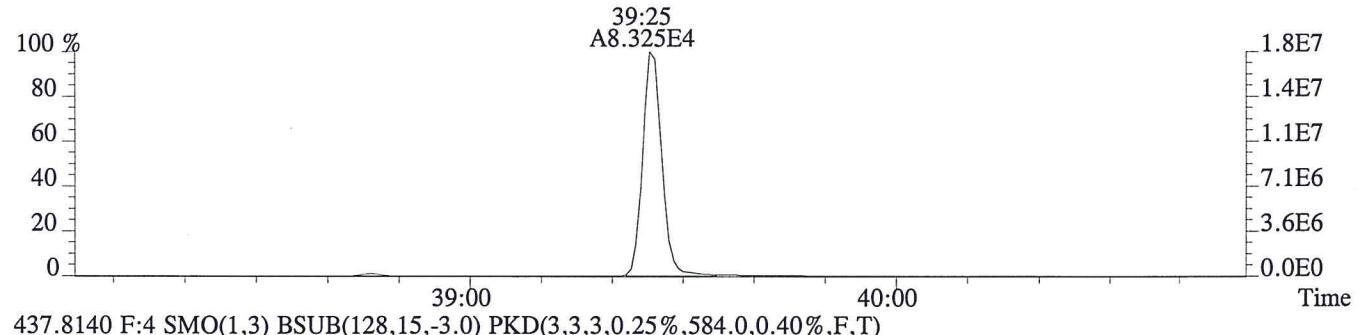
File:P600954 #1-248 Acq:14-OCT-2015 02:09:16 Probe EI+ Magnet SIR VG BioTech Mass spectf  
Sample#1 Exp:CS3  
423.7766 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,880.0,0.40%,F,T)



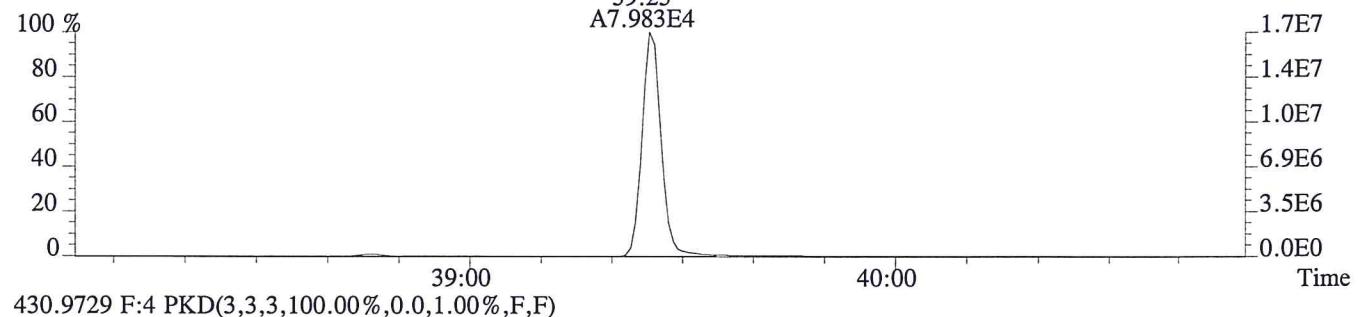
425.7737 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,904.0,0.40%,F,T)



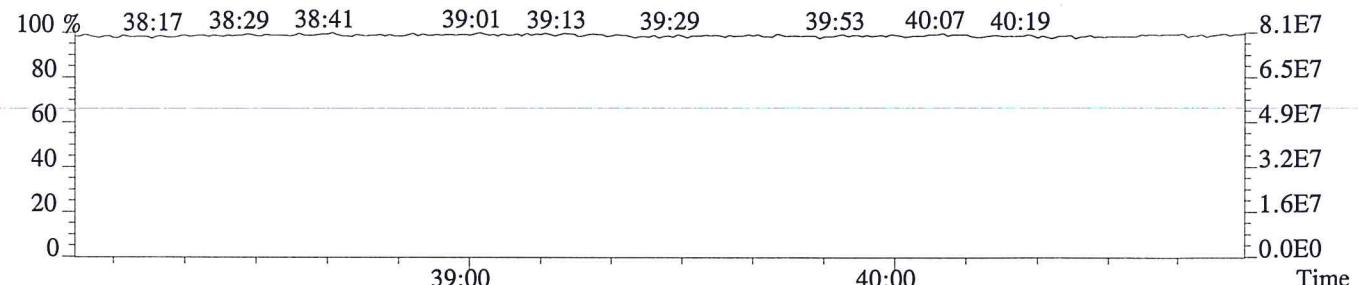
435.8169 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1332.0,0.40%,F,T)



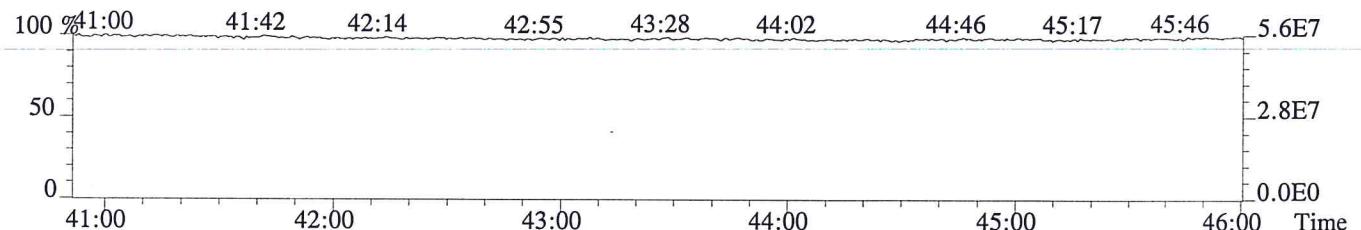
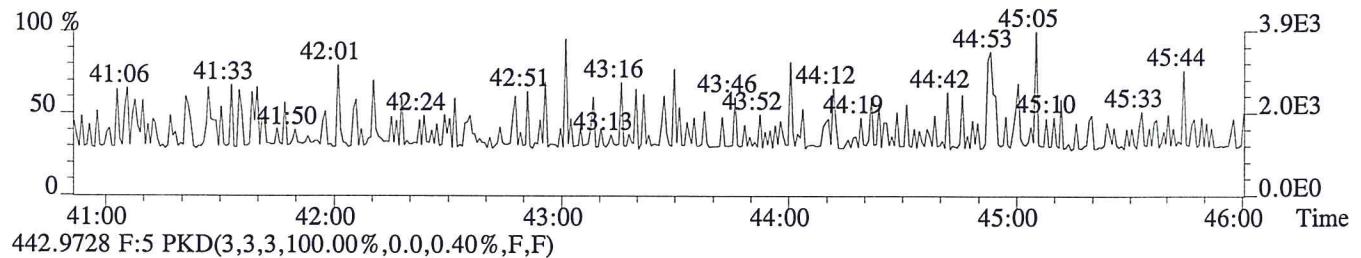
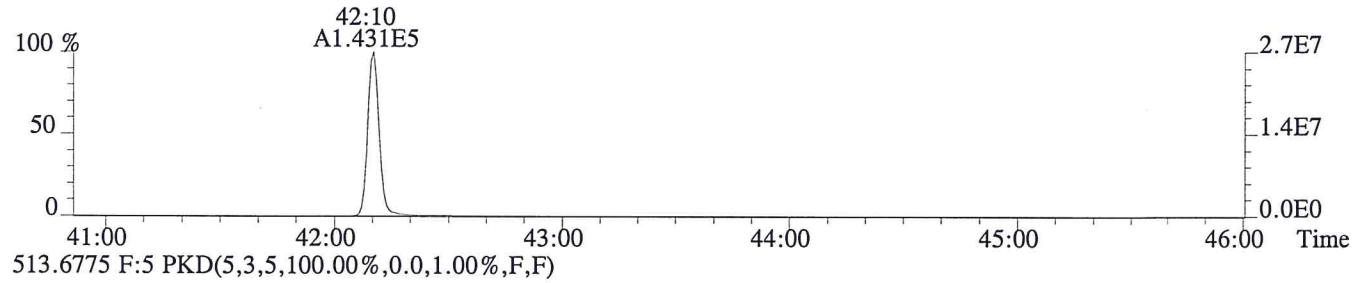
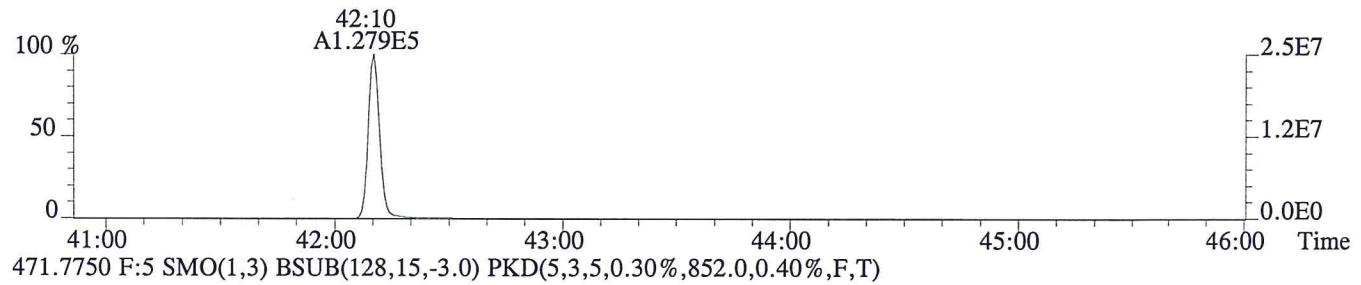
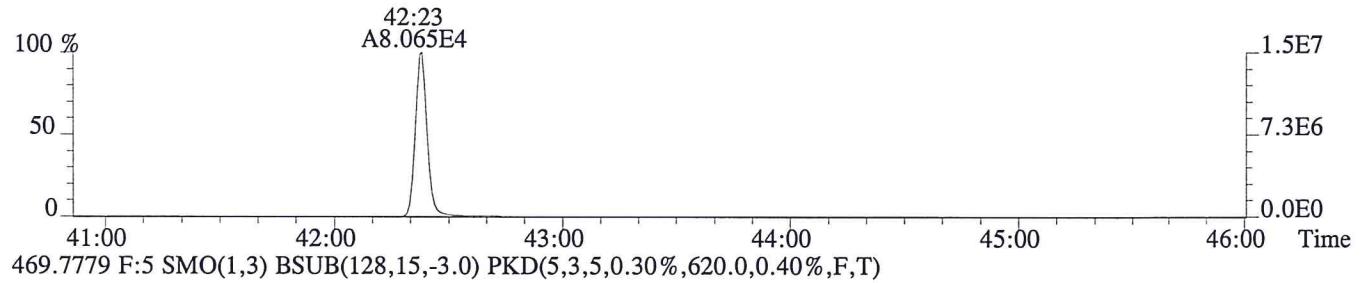
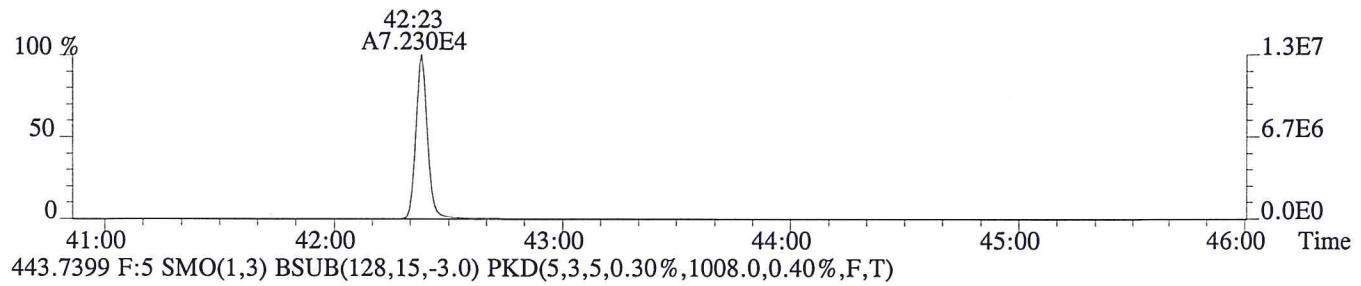
437.8140 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,584.0,0.40%,F,T)



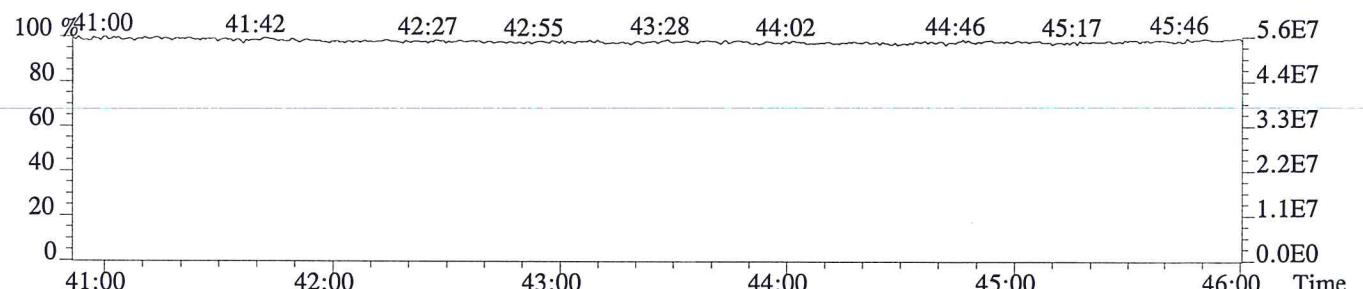
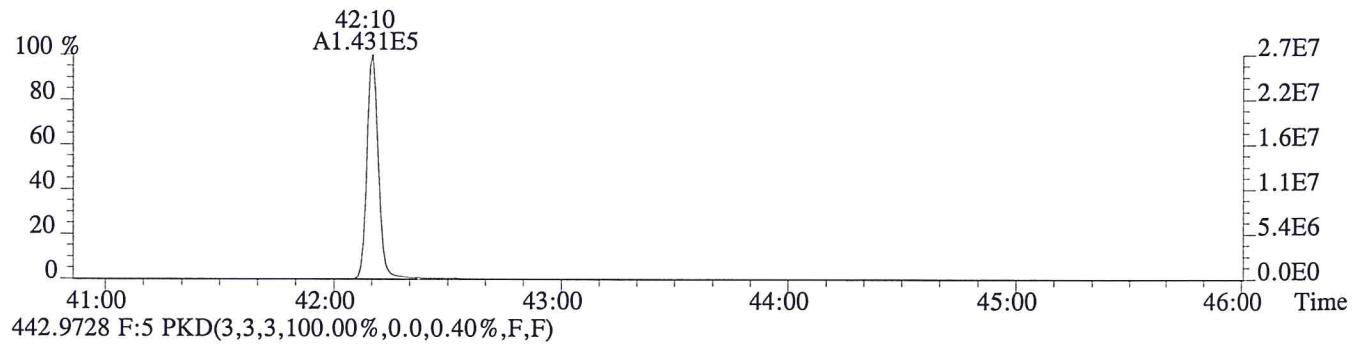
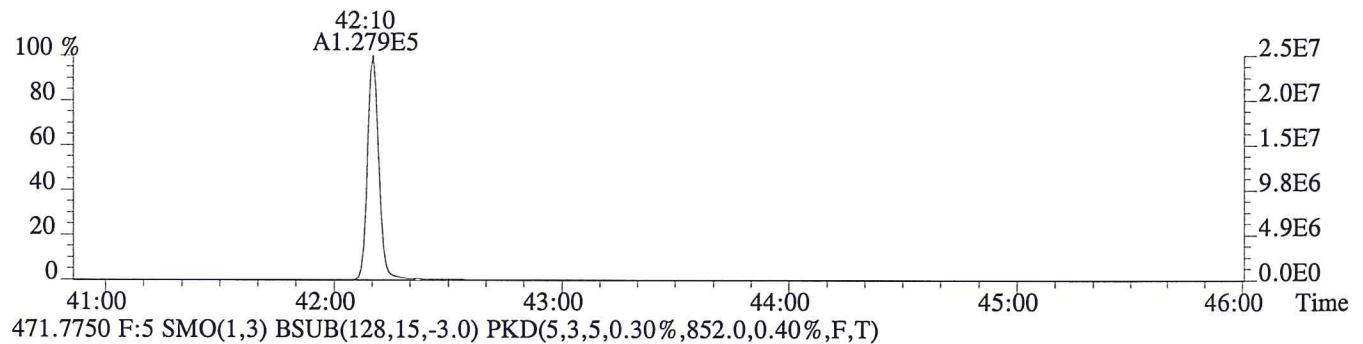
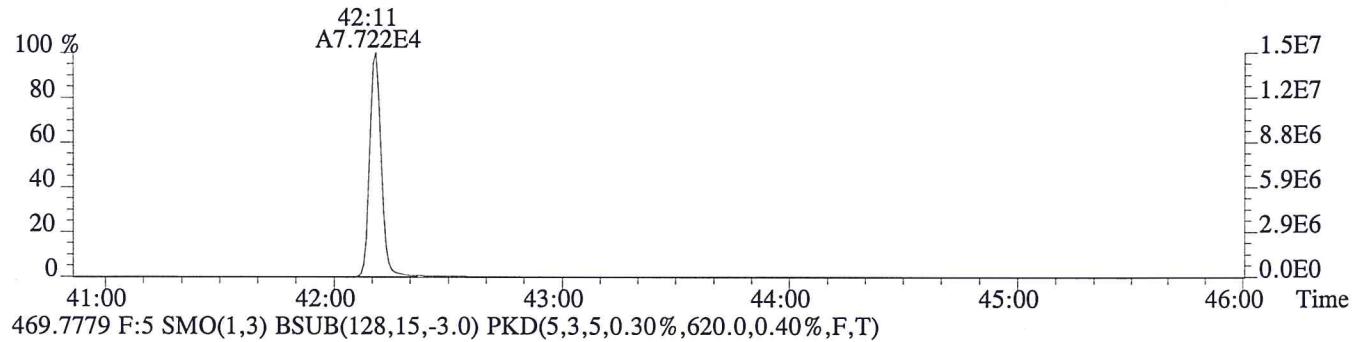
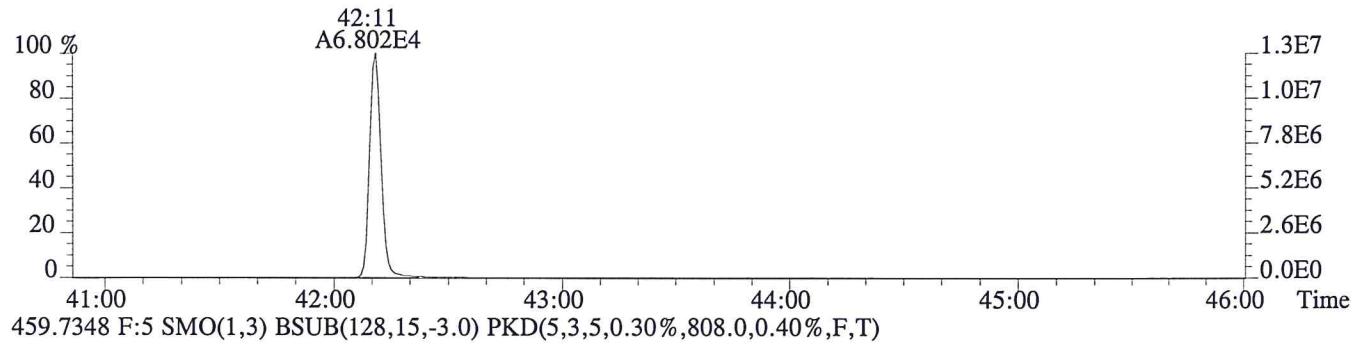
430.9729 F:4 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



File:P600954 #1-464 Acq:14-OCT-2015 02:09:16 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:CS3  
 441.7428 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,672.0,0.40%,F,T)



File:P600954 #1-464 Acq:14-OCT-2015 02:09:16 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:CS3  
 457.7377 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,836.0,0.40%,F,T)





## Initial Calibration

**ALS Environmental - Houston HRMS**  
10450 Stancliff Rd., Suite 210, Houston, TX 77099  
Phone (713)266-1599 Fax (713)266-0130  
[www.alsglobal.com](http://www.alsglobal.com)

RIGHT SOLUTIONS | RIGHT PARTNER

## Laboratory Review Checklist: HRMS Initial Calibration

Method: 1613/8290	Process Date: 8/20/2015				
Instrument Name: E-HRMS-08	Calibration File Name: P6-1508191613I				
Processor Name: Gisela Cruz	Reviewer Name: Sameh Attalla				
Supervisor: Lan Le					
Description	Yes	No	NA	NR	ER#
<b>Analytical Sequence</b>					
Does the analytical sequence summary accurately reflect the instrument run log, including ICV?	✓				
Was a Mass Resolution Check performed at the beginning and end of the 12-hour sequence?	✓				
Were all calibration standards and the ICV analyzed within the same 12-hour sequence?	✓				
Were all calibration standards analyzed only once?	✓				
Was the ICV analyzed after the ICAL, before analyzing samples?	✓				
✓					
<b>Mass Resolution Check</b>					
Are beginning and ending resolution checks provided and legible?	✓				
Were all target masses >10,000 resolving power at the beginning of the sequence?	✓				
Were all target masses >10,000 resolving power at the end of the sequence?	✓				
For PCB analysis, were masses at the low and high end of each function mass range >8,000?				✓	
Where automatic printout of the mass resolution were not >10,000, was the resolution inspected by a trained analyst, including manual calculation of the resolution, if warranted?				✓	
<b>Window Define/209</b>					
Is the window defining mix summary present, and accompanied by SICPs/Chromatograms for the WDM?	✓				
Was the WDM/Column Performance/209 solution analyzed prior to the analysis of the calibration standards?	✓				
Was 2,3,7,8-TCDD peak valley <25% to any other TCDD?	✓				
Were all first and last eluters adequately resolved in each function?	✓				
If first and last eluters were not resolved, was corrective action performed and documented, followed by a reanalysis of the WDM?				✓	
Was the retention time of PCB 209 >55 min?				✓	
Were the following congeners uniquely resolved (valley height <40% of the shortest peak)? PCB-34 and PCB-23 PCB-187 and PCB-182				✓	
Did PCB 156/157 co-elute within 2 seconds at peak maximum?				✓	
<b>Calibration Standards</b>					
Were there at least 5 calibration standards analyzed?	✓				
If not all calibration standards were used, were the omitted standards either the lowest or highest calibration standard?				✓	
Are all sample response summaries, S/N height summaries, and SICPs included (and legible) for the entire sequence?	✓				

## Laboratory Review Checklist: HRMS Initial Calibration

Method: 1613/8290	Process Date: 8/20/2015				
Instrument Name: E-HRMS-08	Calibration File Name: P6-1508191613I				
Processor Name: Gisela Cruz	Reviewer Name: Sameh Attalla				
Supervisor: Lan Le					
Description	Yes	No	NA	NR	ER#
Did each calibration point meet method criteria for Ion Abundance Ratio for all analytes and labeled standards?	✓				
Did each calibration point meet method criteria for signal-to-noise ratios (S/N)?	✓				
Were area counts for the highest calibration standard below levels of saturation?	✓				
Were manual integrations technically justified to correct for poor software integration?				✓	
Response Factors					
Is the ICAL Response Factor Summary present, including RR/RF values for each native/labeled analyte at each level of calibration?	✓				
Were all calibration standards used in determining response factors?	✓				
Were relative response factors (RR) for each native analyte calculated at each calibration point?	✓				
Did the RSD for RRFs for each native analyte meet method criteria?	✓				
Were response factors (RF) for each native analyte not having a corresponding labeled compound calculated at each calibration point?	✓				
Were RFs for each labeled compound calculated for each calibration point?	✓				
Did the RSD for RF for each labeled compound meet method criteria?	✓				
Initial Calibration Verification					
Is the calibration verification present, including form 4A/B reflecting results for the ICV (Conc. or %D)	✓				
Did all analytes meet method criteria for the ICV.	✓				

Laboratory Review Checklist: Initial Calibration	
Method: 1613/8290	Process Date: 08/20/2015
Instrument Name: E-HRMS-08	Calibration File Name: P6-1508191613I
Processor Name: Gisela Cruz	Reviewer Name:
ER# <sup>s</sup>	Description
NA = Not Applicable;	
NR = Not Reviewed;	
R# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).	

5DFC  
PCDD/PCDF ANALYTICAL SEQUENCE SUMMARY

Lab Name: ALS ENVIRONMENTAL

Contract:

Lab Code: TX01411      Episode No.:

SDG No.:

GC Column: DB-5MSUI      ID: 0.25 (mm)      Instrument ID: E-HRMS-08

Init. Calib. Date: 08/19/15

Init. Calib.Times: 10:52

THE ANALYTICAL SEQUENCE OF STANDARDS, SAMPLES, BLANKS, SPIKES AND  
DUPLICATES IS AS FOLLOWS:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
WINDOW DEFINE	WINDOW DEFINE	P600002	19-AUG-15	10:52:49
76554	CS0.5	P600004	19-AUG-15	12:31:21
76555	CS1	P600005	19-AUG-15	13:20:24
76556	CS2	P600006	19-AUG-15	14:09:28
76557	CS3	P600007	19-AUG-15	14:58:32
76558	CS4	P600008	19-AUG-15	15:47:35
76956	CS5	P600009	19-AUG-15	16:36:39
CS3 SECOND SOURCE	CS3 SECOND SOU	P600011	19-AUG-15	18:14:46

# e=opus 4

## Sample List Report

## MassLynx 4.1 SCN815 SCN795

Sample List: C:\MassLynx\EHRMS08.PRO\SampleDB\20150819.SPL  
Last Modified: Friday, August 21, 2015 09:39:32 Central Daylight Time  
Printed: Friday, August 21, 2015 09:39:49 Central Daylight Time

Page 1 of 1

Page Position (1, 1)

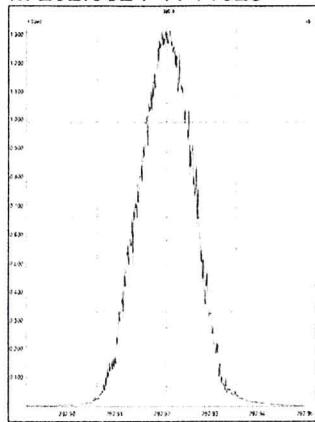
		e: P6-1508191613I		e: P6 00011res							
		e: P6-150819 m23I		e: P6 00011resm23							
Date	Time	File Name	Lab Sample ID	Client File Text	Sample Type	Bottle	MS File	Inlet File	Analyst	Comments	
1	08/19/15 10:02	P600001	WD	WD	Standard	Tray1:1	EPA1613_ALS	Dioxin_ALS	<u>JL</u>	HRMS check 09:57	
2	10:52	P600002	WD	WD	Standard	Tray1:1	EPA1613_ALS	Dioxin_ALS			
3	11:43	P600003	Nonane	Nonane	Blank	Tray1:2	EPA1613_ALS	Dioxin_ALS			
4	12:31	P600004	76554	CS0.5	Standard	Tray1:3	EPA1613_ALS	Dioxin_ALS			
5	13:20	P600005	76555	CS1	Standard	Tray1:4	EPA1613_ALS	Dioxin_ALS			
6	14:09	P600006	76556	CS2	Standard	Tray1:5	EPA1613_ALS	Dioxin_ALS			
7	14:58	P600007	76557	CS3	Standard	Tray1:6	EPA1613_ALS	Dioxin_ALS			
8	15:47	P600008	76558	CS4	Standard	Tray1:7	EPA1613_ALS	Dioxin_ALS			
9	16:36	P600009	76956	CS5	Standard	Tray1:8	EPA1613_ALS	Dioxin_ALS			
10	17:25	P600010	Nonane	Nonane	Blank	Tray1:2	EPA1613_ALS	Dioxin_ALS			
11	18:14	P600011	54819	CS3 Second Source	Standard	Tray1:9	EPA1613_ALS	Dioxin_ALS	<u>JL</u>	HRMS check 19:12	
12	--	--	--	--	Standard	--	--	--	--	--	
13	--	--	--	--	--	--	--	--	--	--	
14	--	--	--	--	--	--	--	--	--	--	

JL  
08/20/15

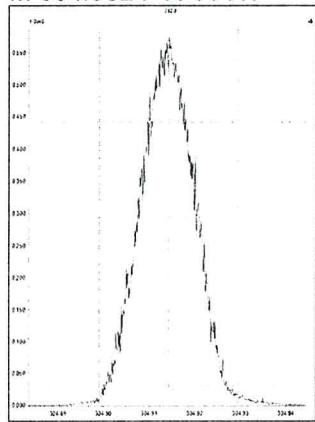
File: Experiment: EPA1613\_ALS.exp Reference: pfk.ref Function: 1 @ 200 (ppm)

Printed: Wednesday, August 19, 2015 09:57:50 Central Daylight Time

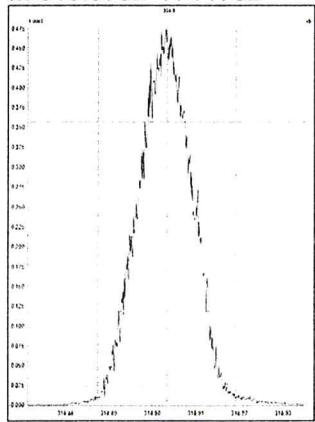
M 292.9824 R 11625



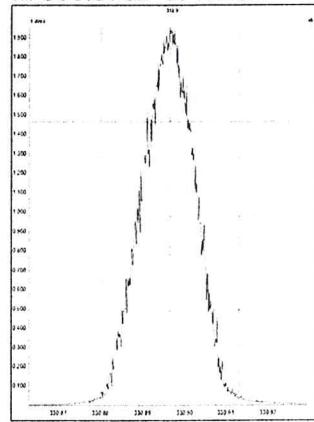
M 304.9824 R 11417



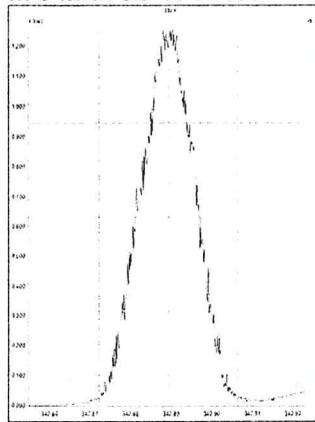
M 318.9792 R 11792



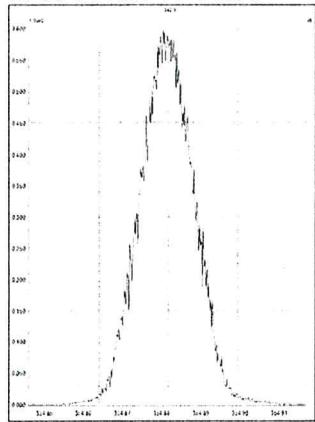
M 330.9792 R 12252



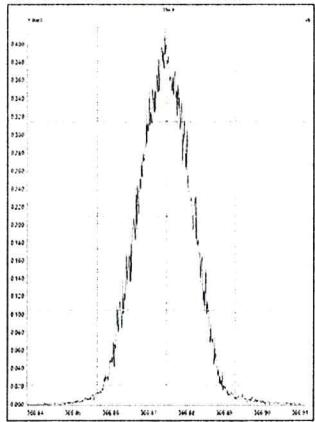
M 342.9792 R 11468



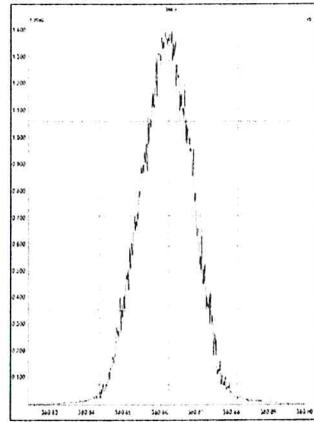
M 354.9792 R 12076



M 366.9792 R 11963



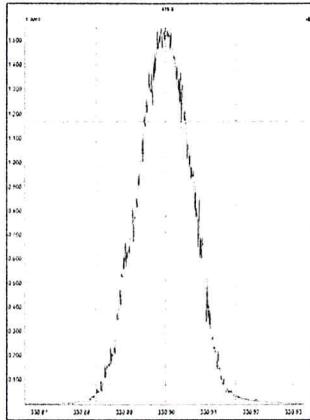
M 380.9760 R 11627



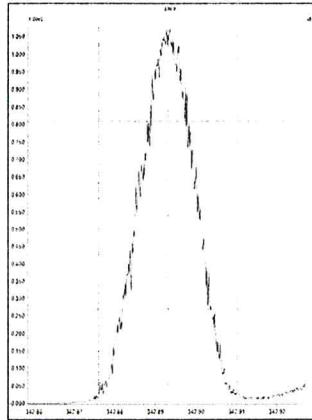
File: Experiment: EPA1613\_ALS.exp Reference: pkf.ref Function: 2 @ 200 (ppm)

Printed: Wednesday, August 19, 2015 09:58:55 Central Daylight Time

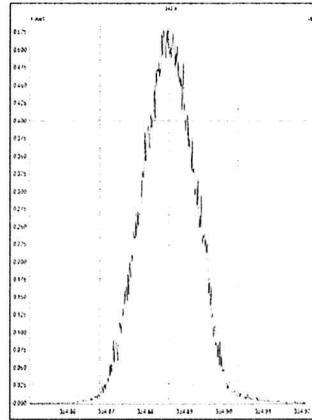
M 330.9792 R 11470



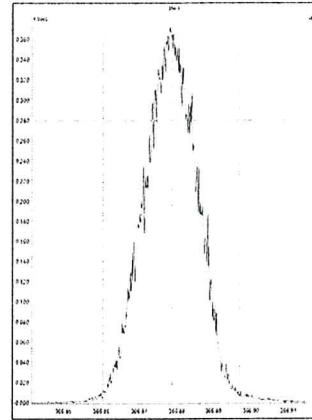
M 342.9792 R 11575



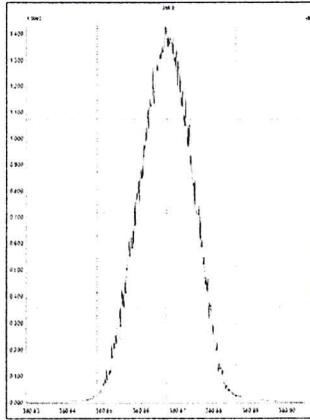
M 354.9792 R 11466



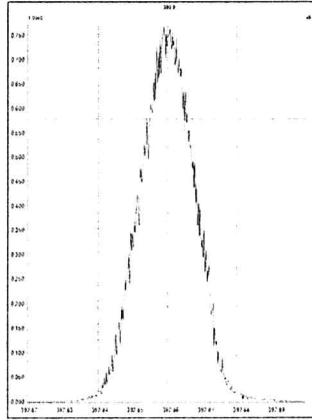
M 366.9792 R 11258



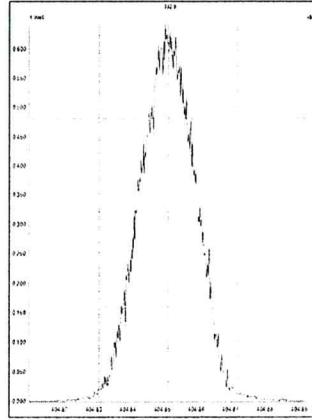
M 380.9760 R 11574



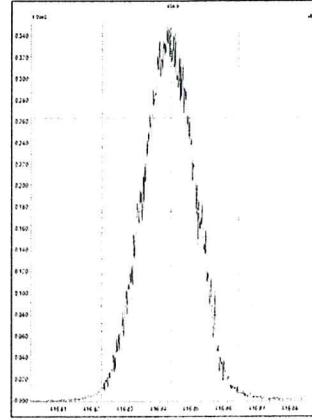
M 392.9760 R 11626



M 404.9760 R 11789



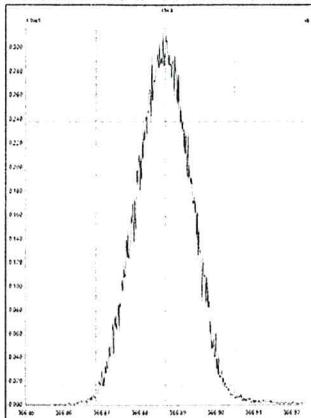
M 416.9760 R 11960



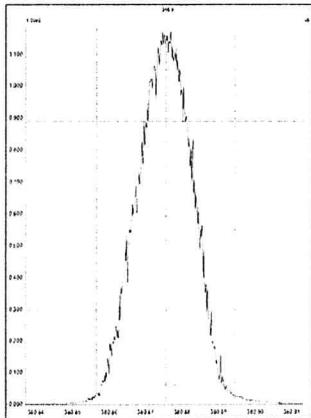
File: Experiment: EPA1613\_ALS.exp Reference: pfk.ref Function: 3 @ 200 (ppm)

Printed: Wednesday, August 19, 2015 09:59:39 Central Daylight Time

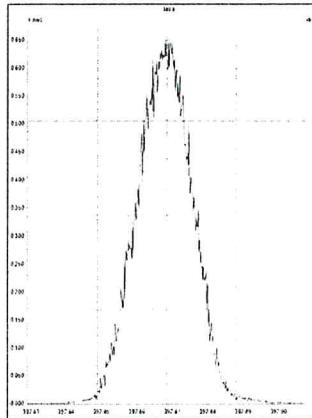
M 366.9792 R 10918



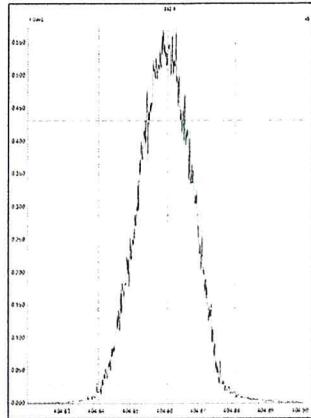
M 380.9760 R 11364



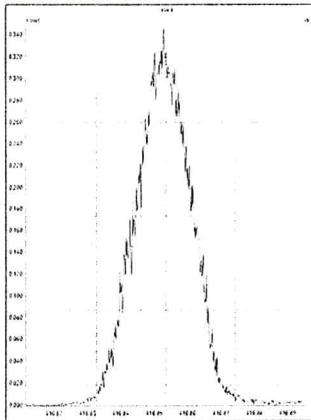
M 392.9760 R 11680



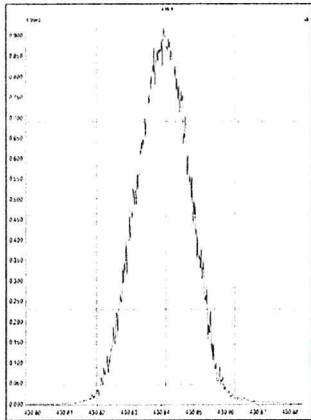
M 404.9760 R 11629



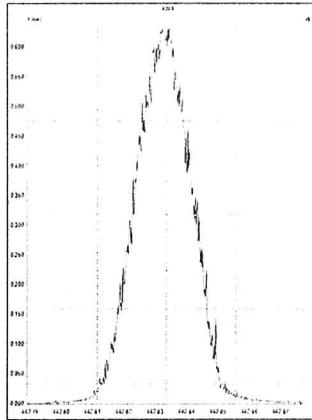
M 416.9760 R 11791



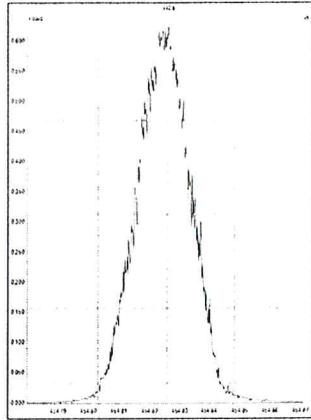
M 430.9728 R 11572



M 442.9728 R 11793



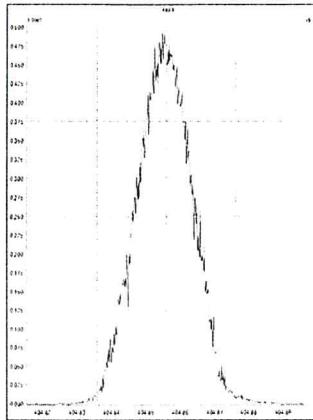
M 454.9728 R 11209



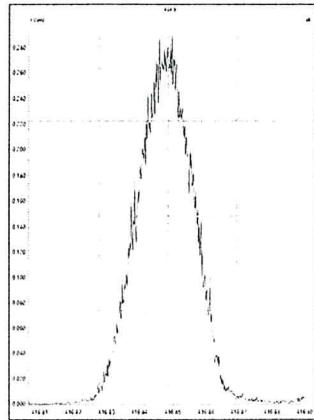
File: Experiment: EPA1613\_ALS.exp Reference: pfk.ref Function: 4 @ 200 (ppm)

Printed: Wednesday, August 19, 2015 10:00:22 Central Daylight Time

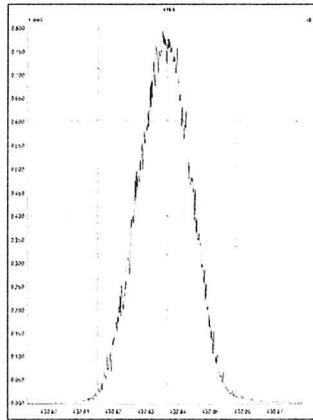
M 404.9760 R 11575



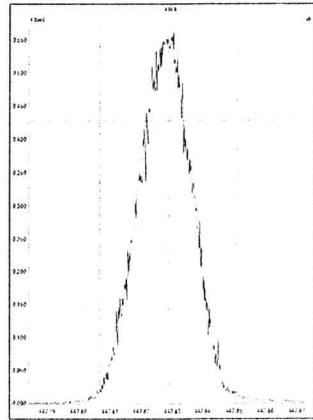
M 416.9760 R 11363



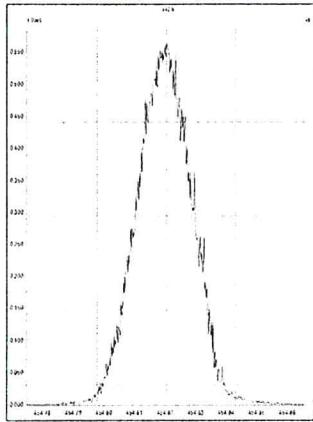
M 430.9728 R 11314



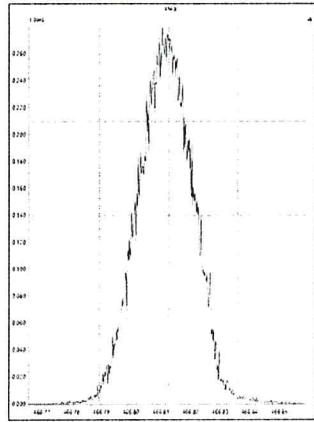
M 442.9728 R 11737



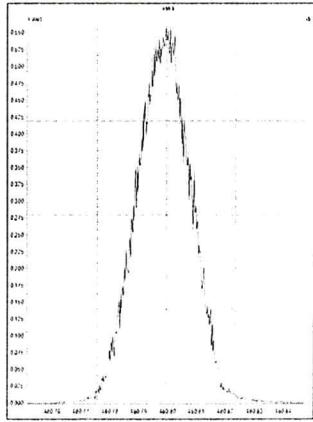
M 454.9728 R 11466



M 466.9728 R 11412



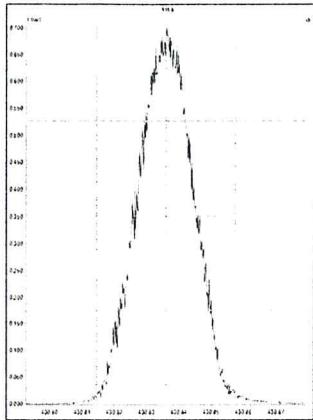
M 480.9696 R 11627



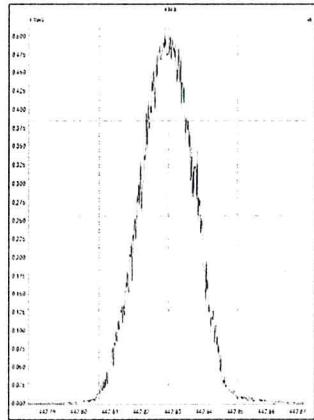
File: Experiment: EPA1613\_ALS.exp Reference: pfk.ref Function: 5 @ 200 (ppm)

Printed: Wednesday, August 19, 2015 10:01:13 Central Daylight Time

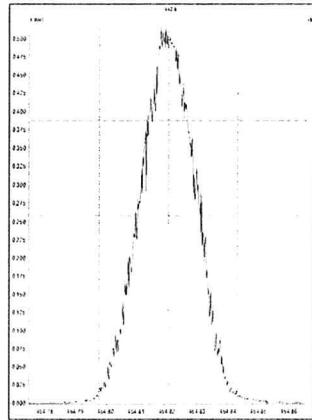
M 430.9728 R 11413



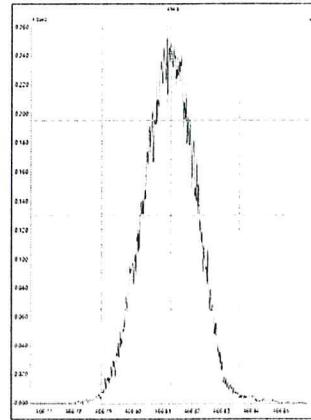
M 442.9728 R 11624



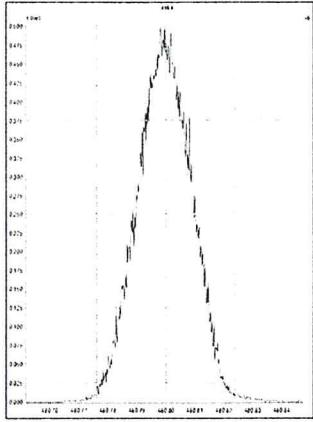
M 454.9728 R 11470



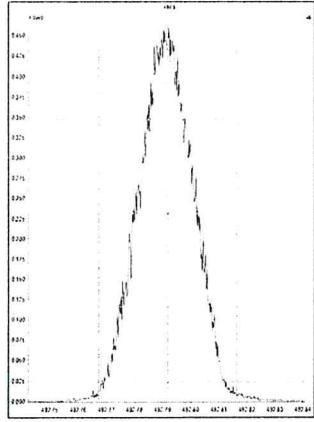
M 466.9728 R 11625



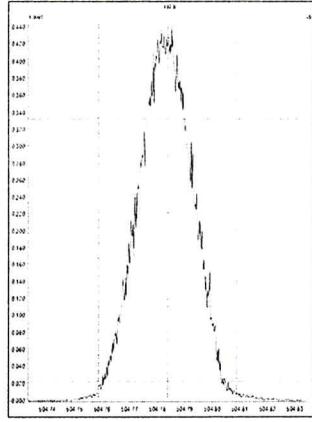
M 480.9696 R 11848



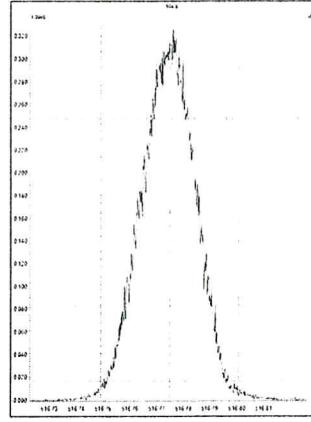
M 492.9696 R 11413



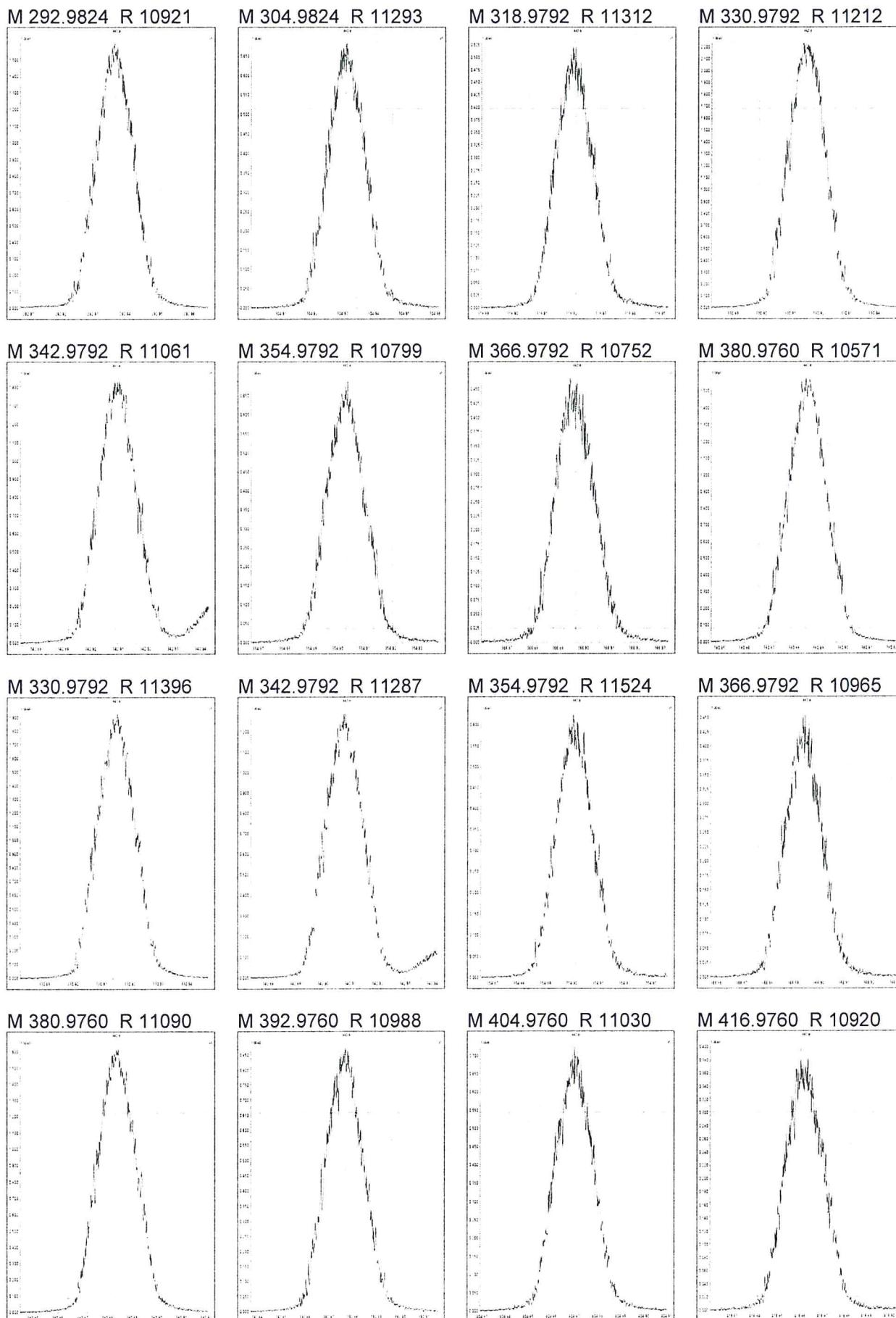
M 504.9696 R 11737



M 516.9697 R 11569

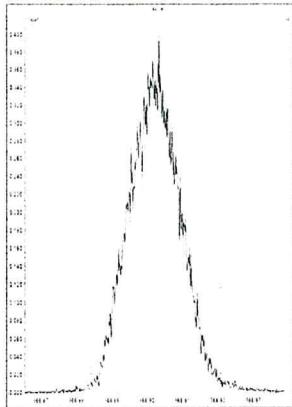


Printed: Wednesday, August 19, 2015 19:12:03 Central Daylight Time

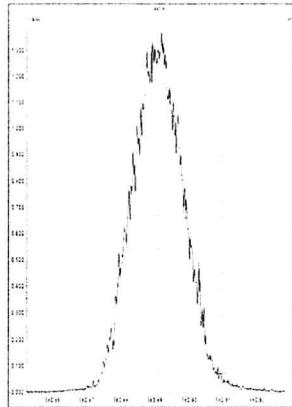


Printed: Wednesday, August 19, 2015 19:12:03 Central Daylight Time

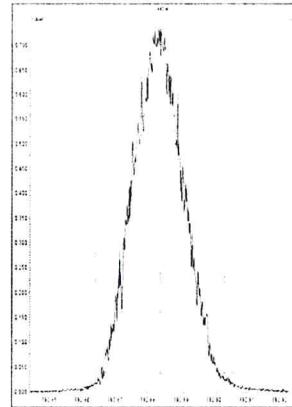
M 366.9792 R 11235



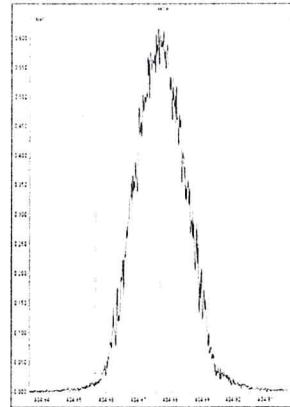
M 380.9760 R 11286



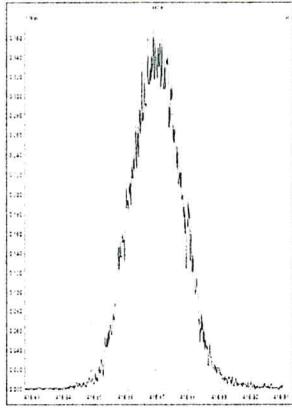
M 392.9760 R 11363



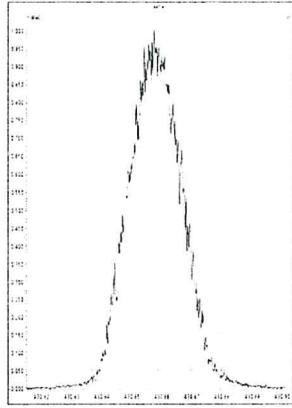
M 404.9760 R 11473



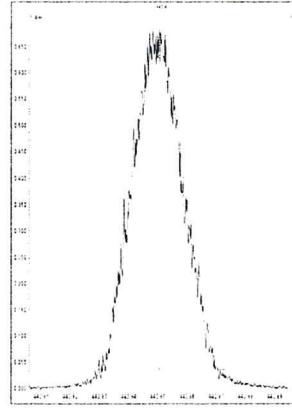
M 416.9760 R 11390



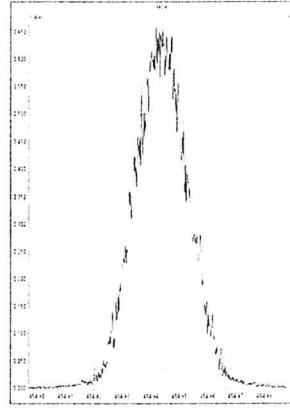
M 430.9728 R 11317



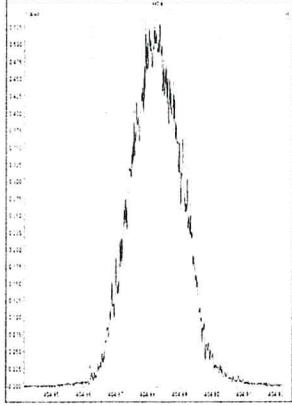
M 442.9728 R 11603



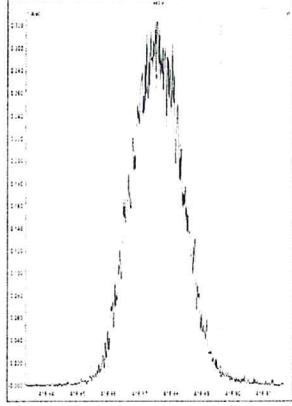
M 454.9728 R 10869



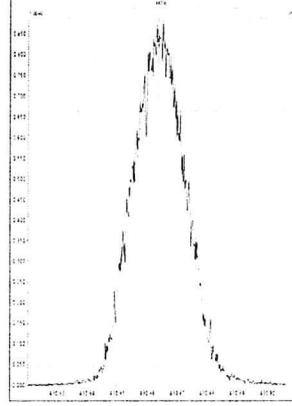
M 404.9760 R 11286



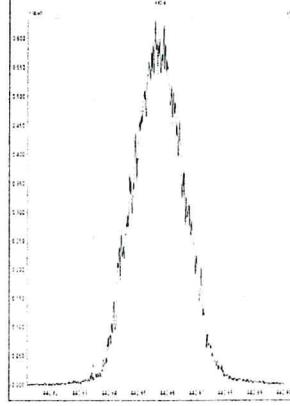
M 416.9760 R 11547



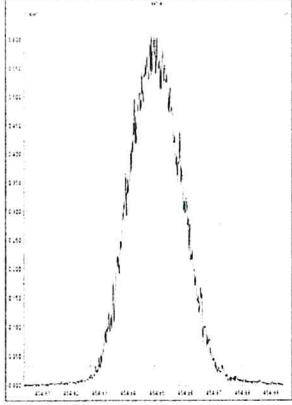
M 430.9728 R 11261



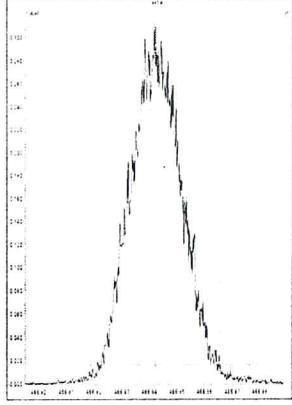
M 442.9728 R 11185



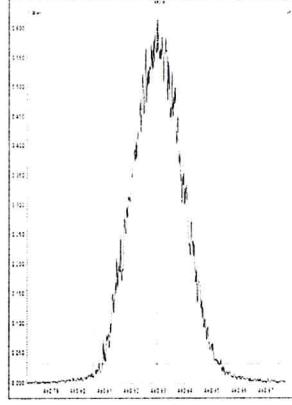
M 454.9728 R 11290



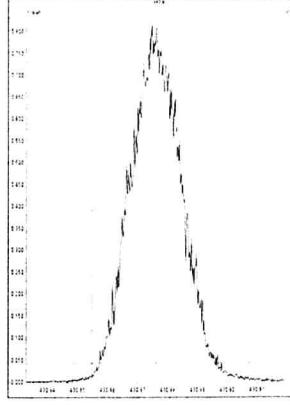
M 466.9728 R 11315



M 480.9696 R 11041

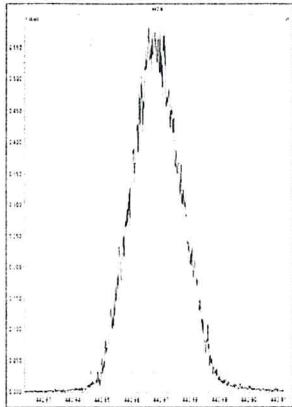


M 430.9728 R 11110

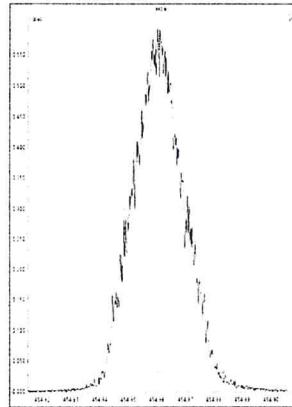


Printed: Wednesday, August 19, 2015 19:12:03 Central Daylight Time

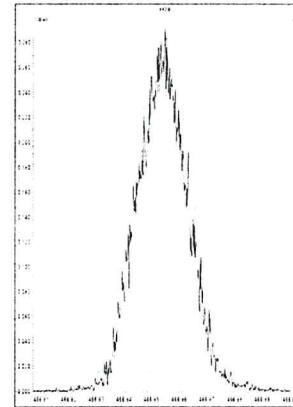
M 442.9728 R 11363



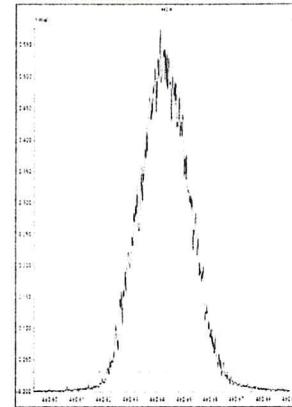
M 454.9728 R 11415



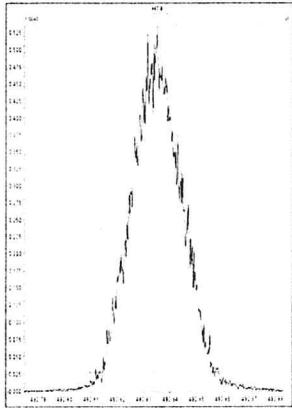
M 466.9728 R 11589



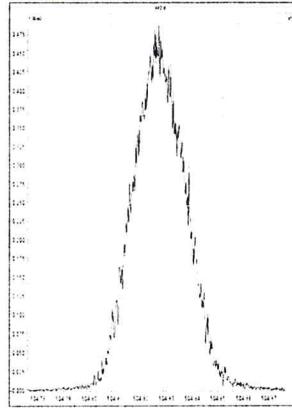
M 480.9696 R 11415



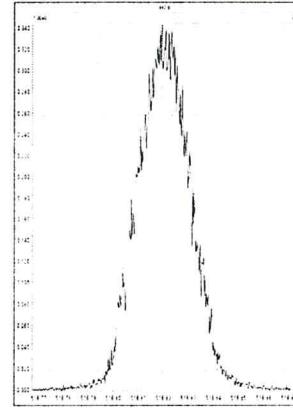
M 492.9696 R 11577



M 504.9696 R 11185



M 516.9697 R 11065



5DFA

WINDOW DEFINING MIX SUMMARY

CLIENT ID:

WDM

Lab Name: ALS Environmental

Lab Code: ALSTX

GC Column: DB-5MSUI

Case No.: SDG No.:  
ID: 0.25 (mm) Lab File ID: P600002

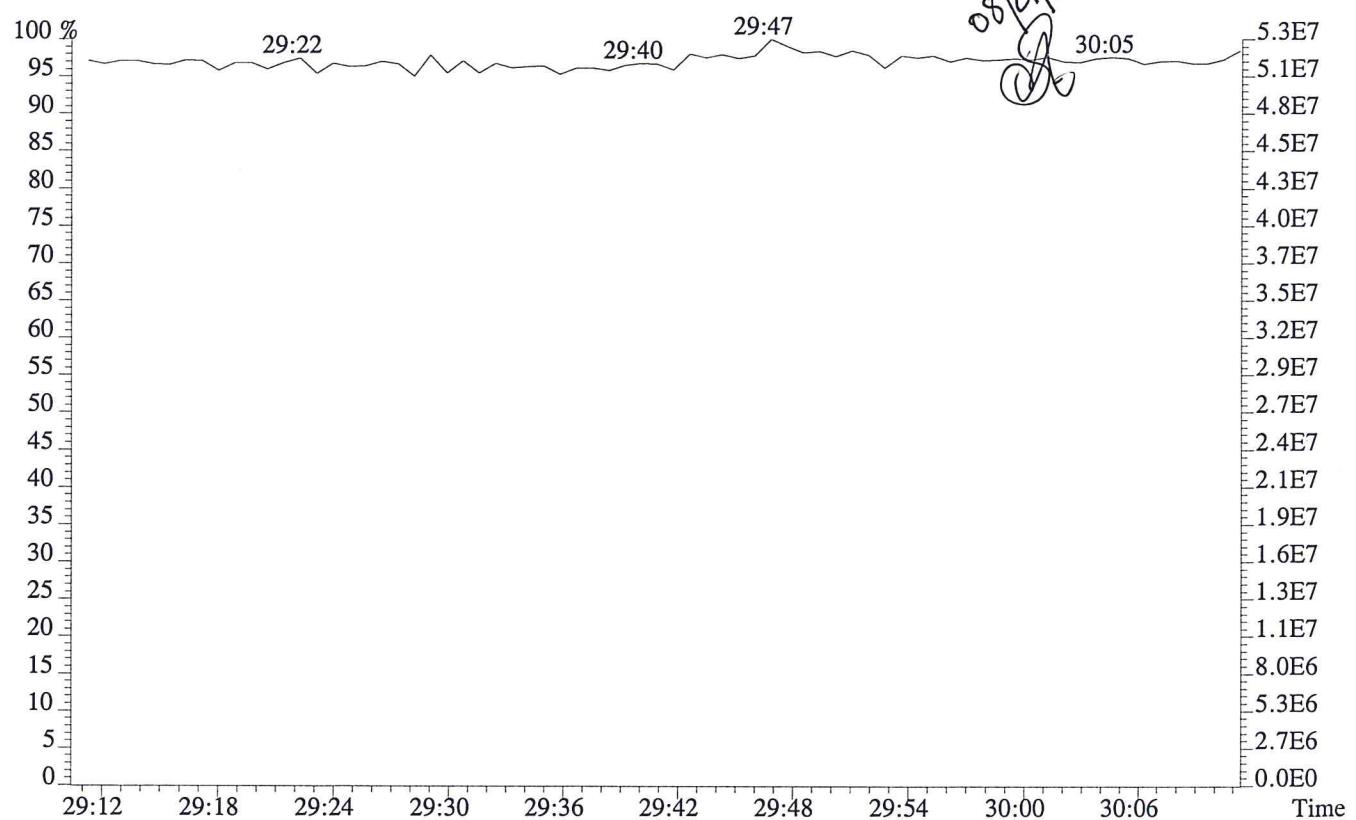
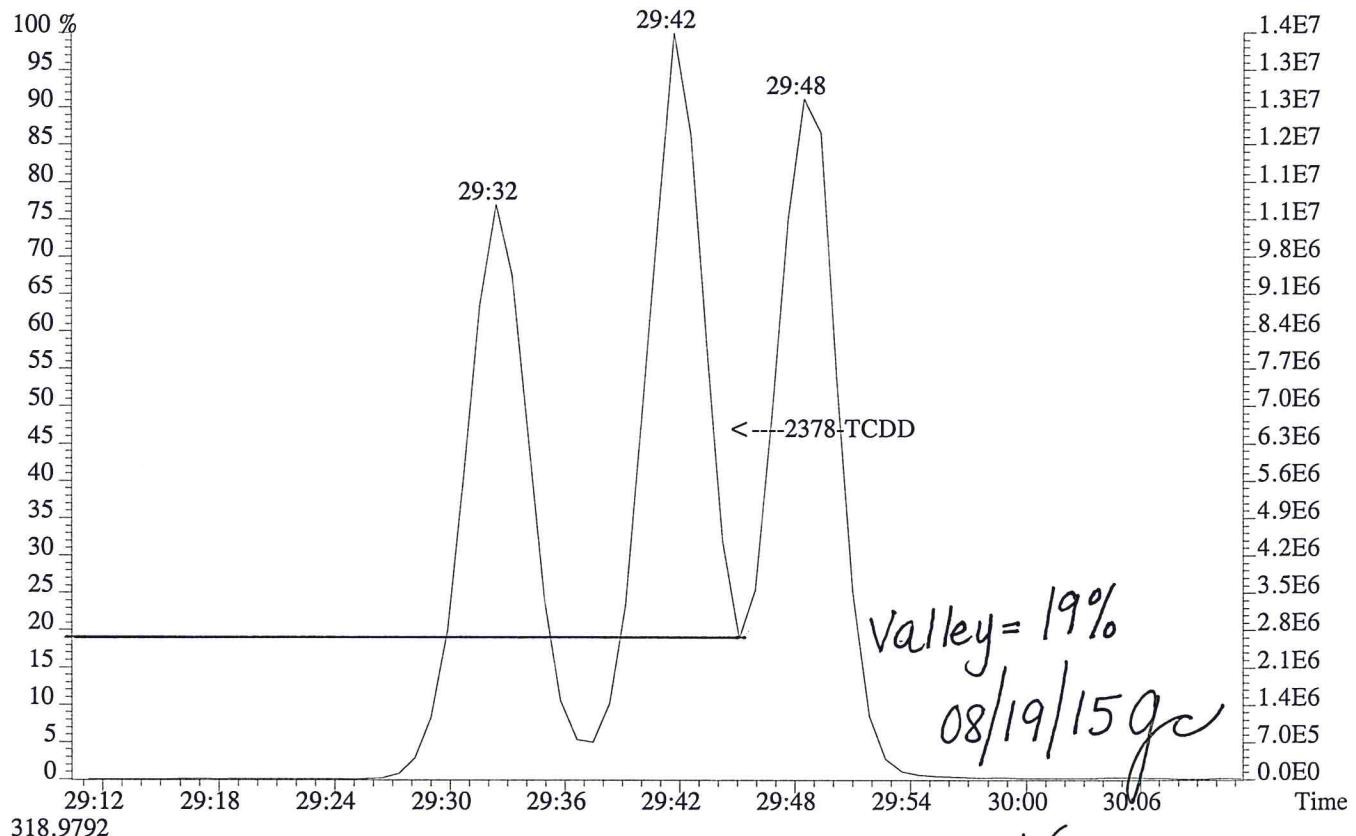
Date Analyzed: 19-AUG-2015

Time Analyzed: 10:52:49

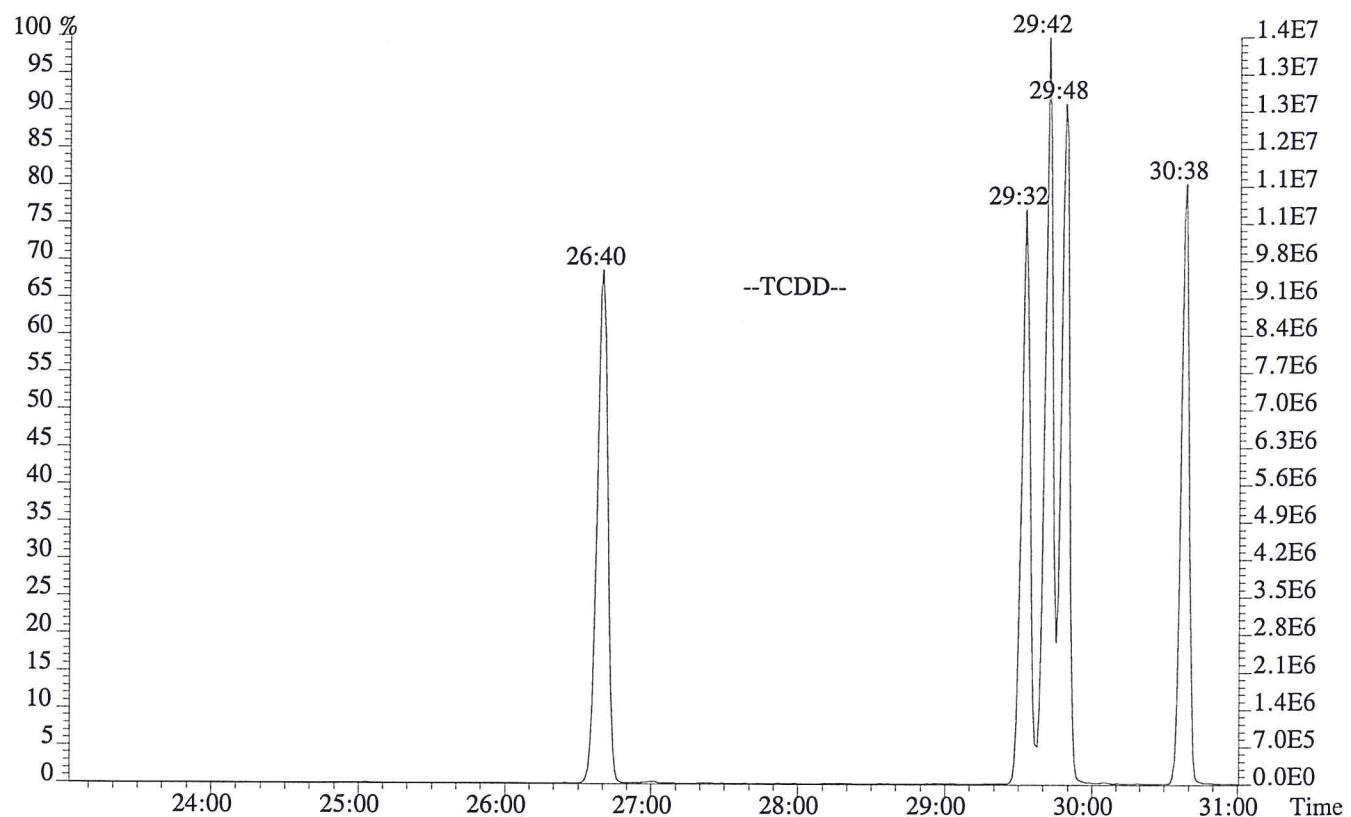
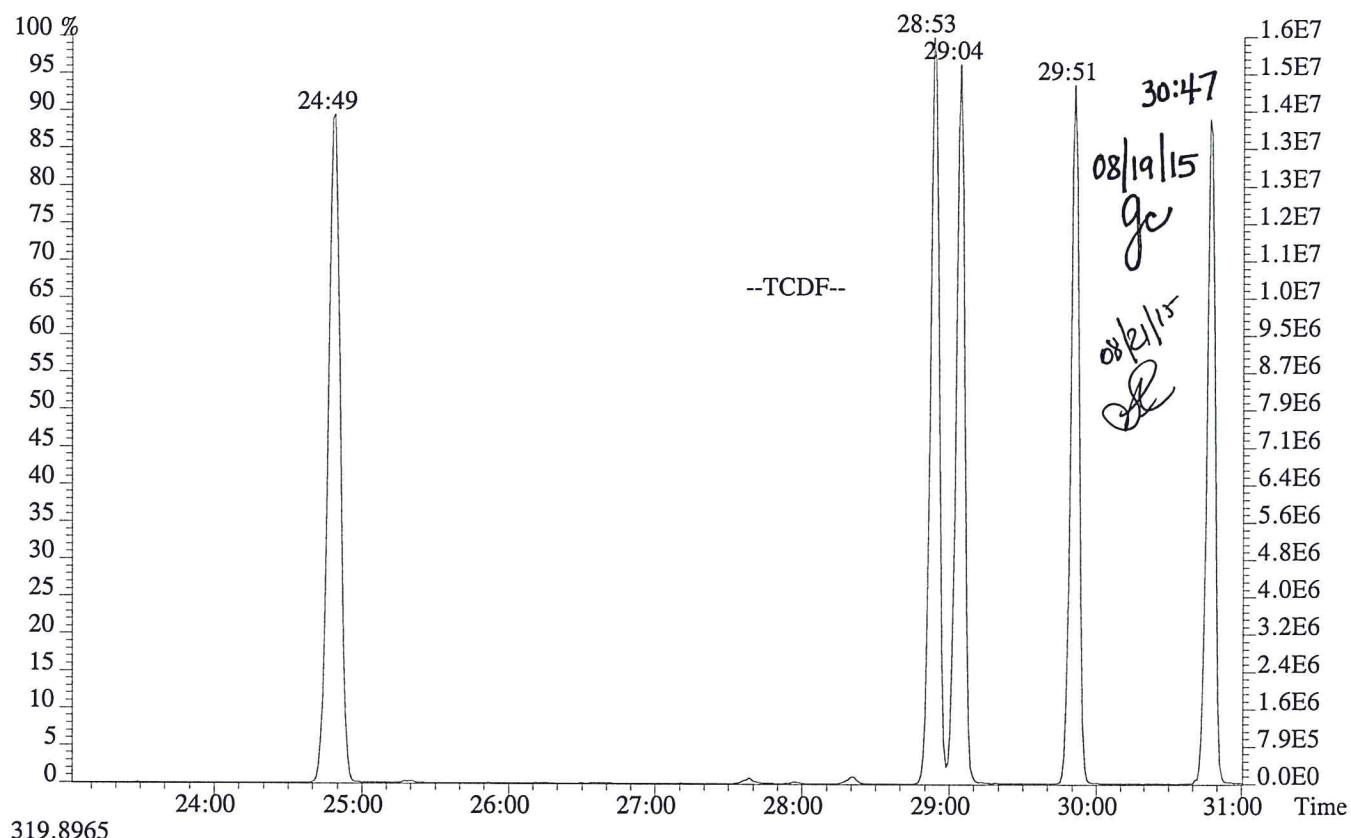
Congener	Retention Time First Eluting	Retention Time Last Eluting
TCDF	24:49	30:47
TCDD	26:40	30:38
PeCDF	30:43	34:48
PeCDD	32:11	34:33
HxCDF	35:26	37:52
HxCDD	35:56	37:28
HpCDF	39:04	40:30
HpCDD	39:19	40:00

% Valley 2378-TCDD: 19 %

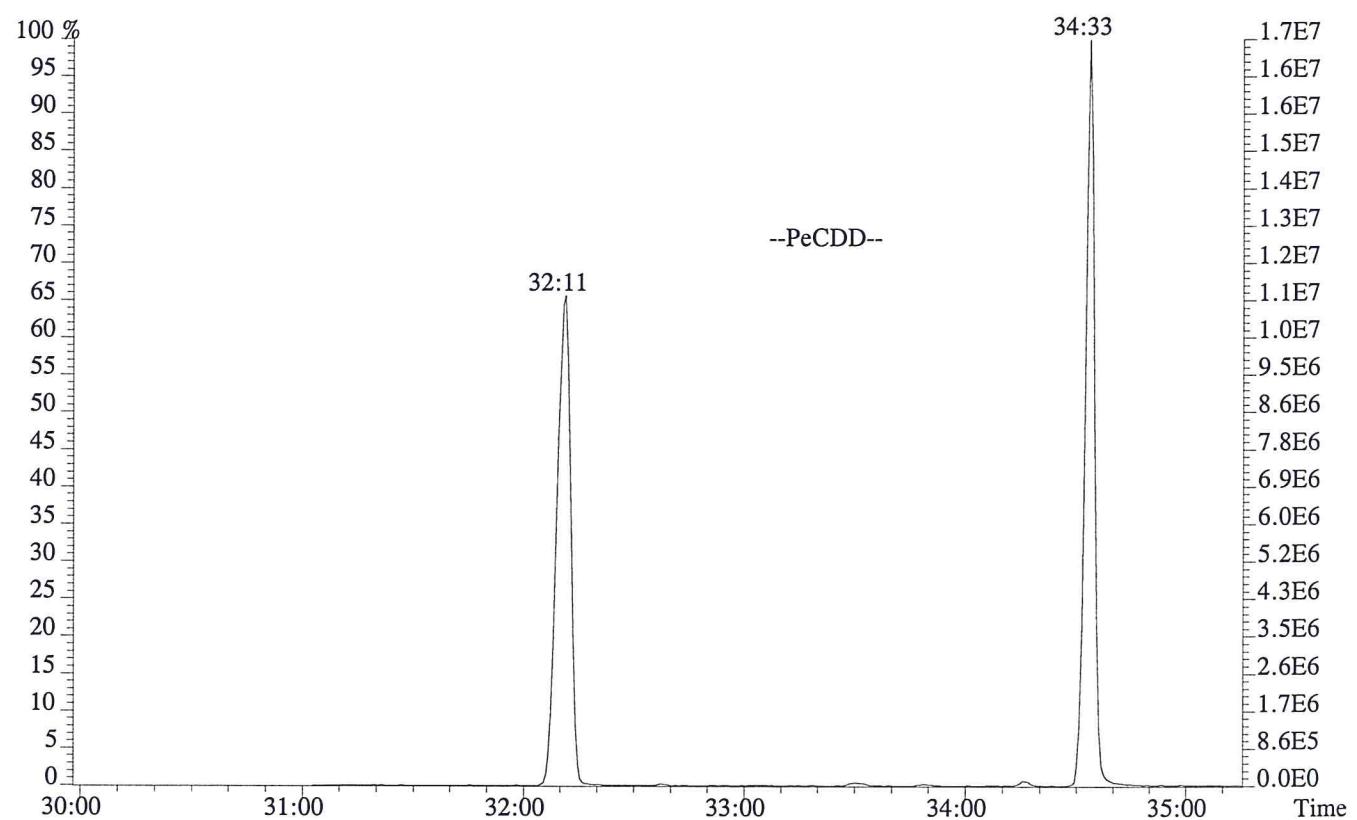
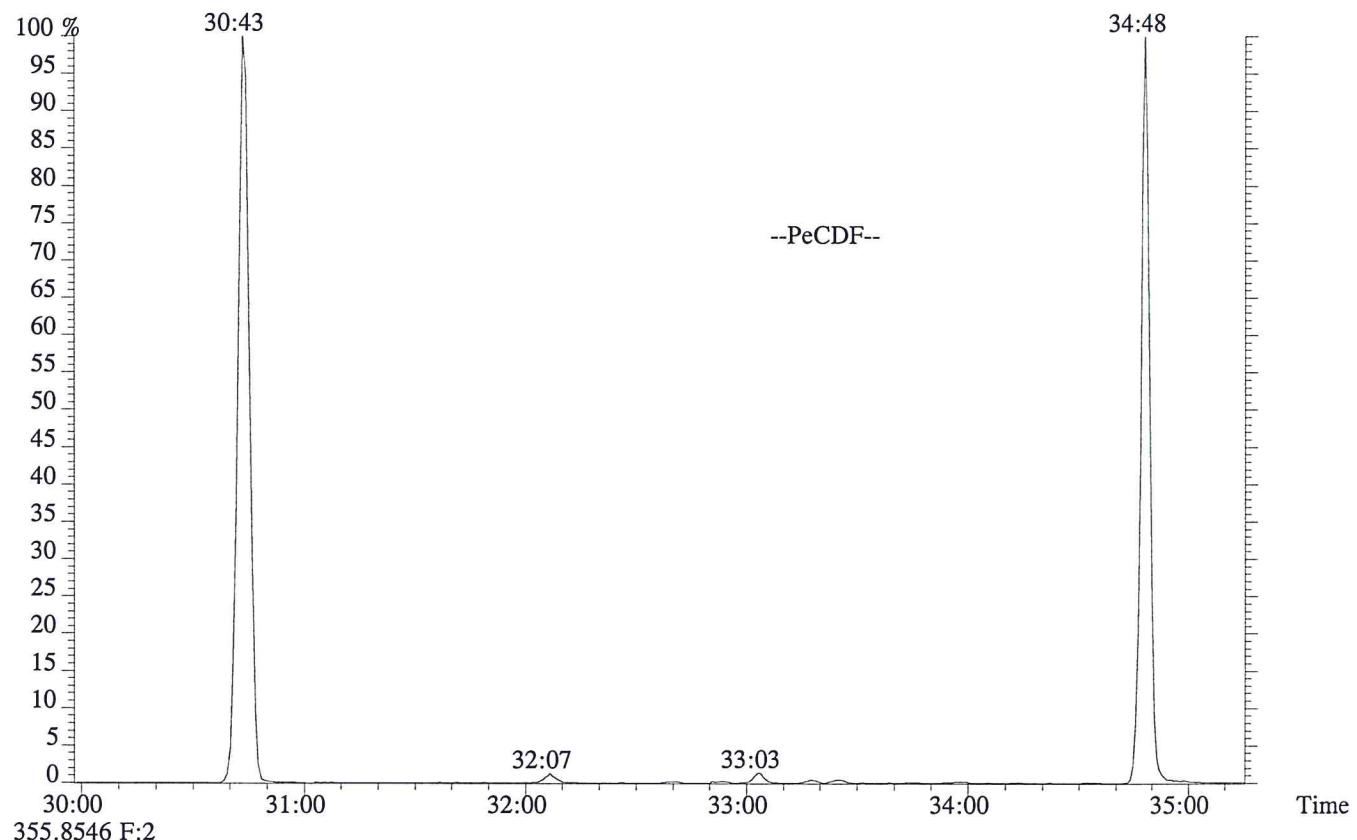
File:P600002 #1-566 Acq:19-AUG-2015 10:52:49 Probe EI+ Magnet SIR VG BioTech Mass spectf  
Sample#1 Exp:WD  
319.8965



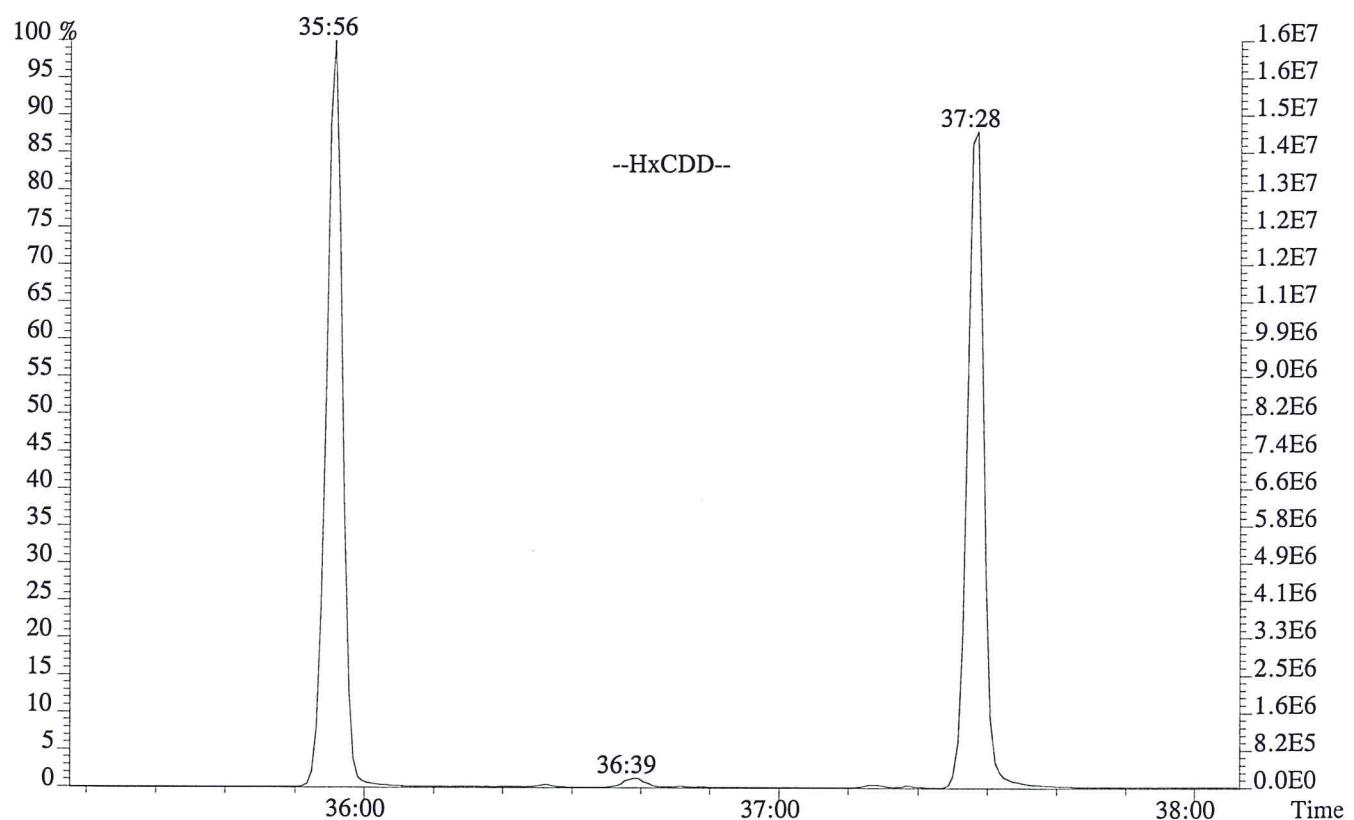
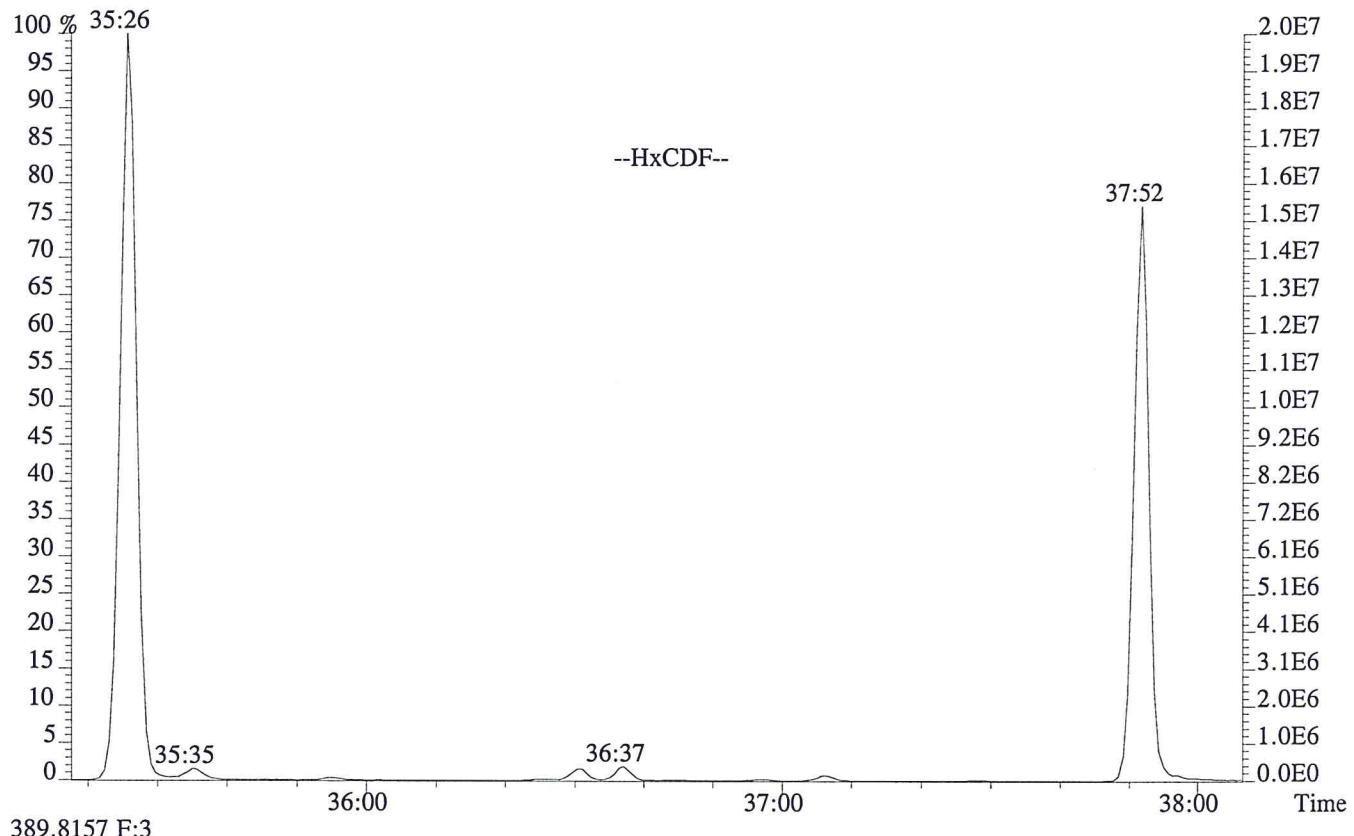
File:P600002 #1-566 Acq:19-AUG-2015 10:52:49 Probe EI+ Magnet SIR VG BioTech Mass spectf  
Sample#1 Exp:WD  
303.9016



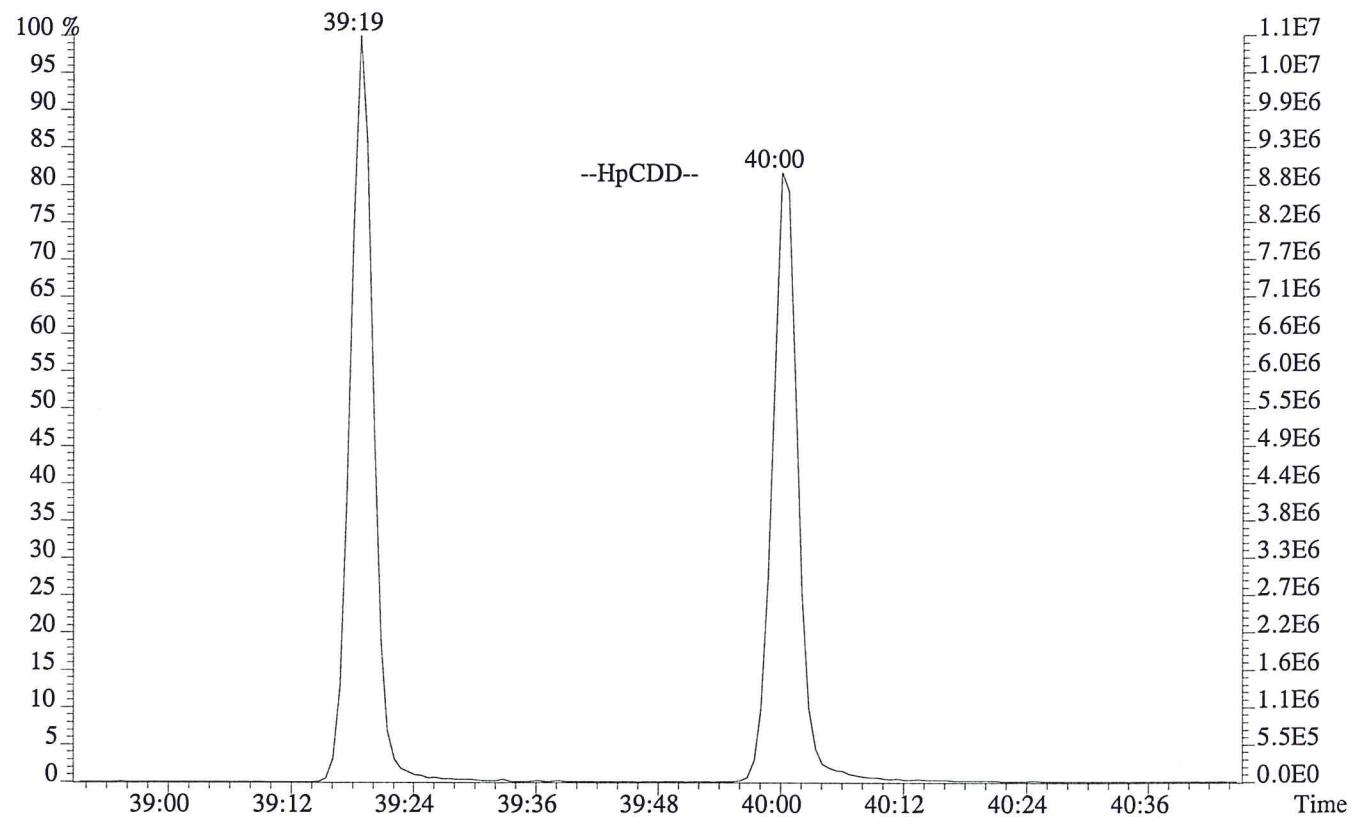
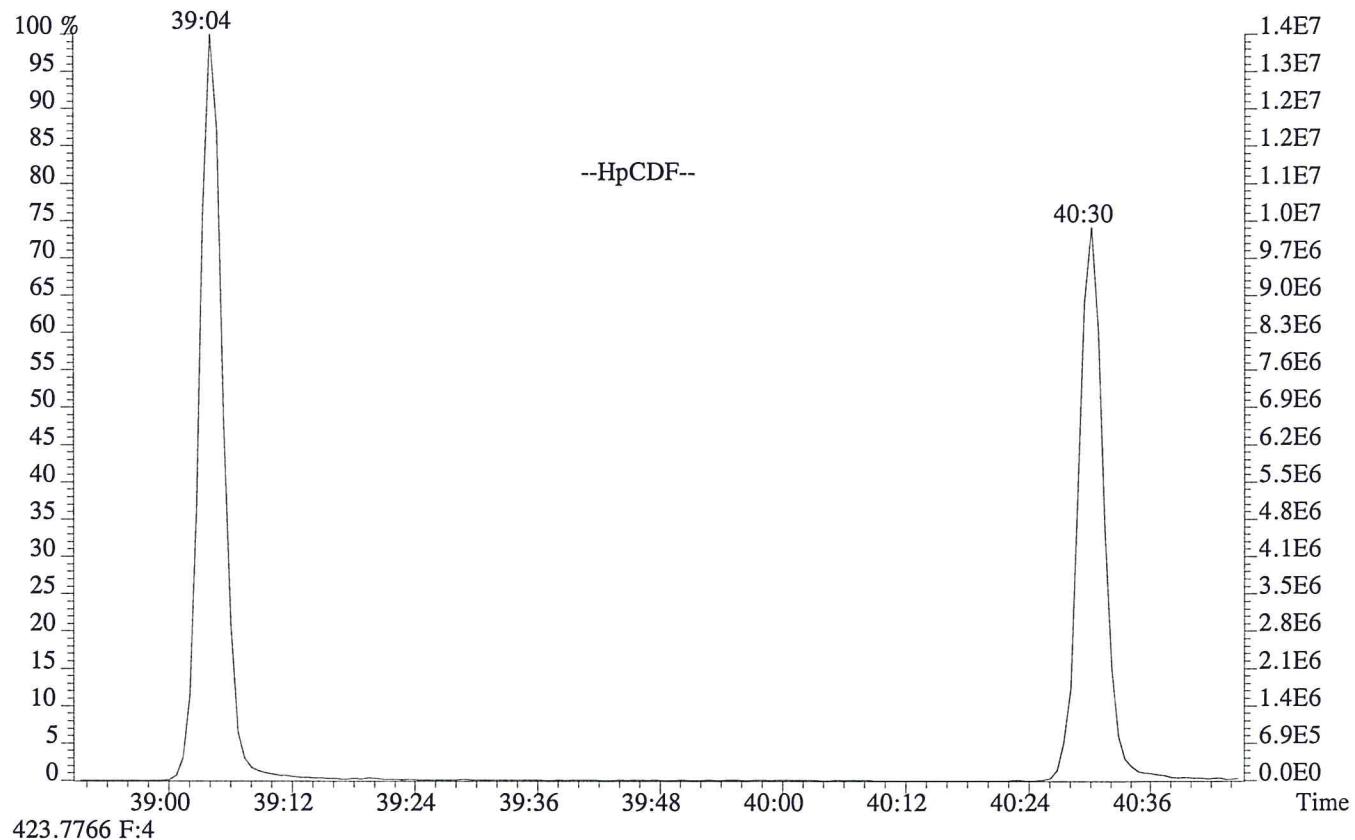
File:P600002 #1-566 Acq:19-AUG-2015 10:52:49 Probe EI+ Magnet SIR VG BioTech Mass spectf  
Sample#1 Exp:WD  
339.8597,339.8597 F:2



File:P600002 #1-299 Acq:19-AUG-2015 10:52:49 Probe EI+ Magnet SIR VG BioTech Mass spect<br/>Sample#1 Exp:WD  
373.8208 F:3



File:P600002 #1-213 Acq:19-AUG-2015 10:52:49 Probe EI+ Magnet SIR VG BioTech Mass spectf  
Sample#1 Exp:WD  
407.7818 F:4



USEPA - CLP  
6DFA6  
CDD/CDF INITIAL CALIBRATION RESPONSE FACTOR SUMMARY  
HIGH RESOLUTION

Lab Name: ALS Environmental  
 Lab Code: ALSTX Case No.:  
 GC Column: DB-5MSUI ID: 0.25 (mm)  
 Init. Calib. Date(s) : 08/19/15  
 Init. Calib. Time.: 10:52

Contract No.:  
 TO No.: SDG No.:  
 Instrument ID: E-HRMS-08  
 Method

RR/RRF

Target Analytes							RR/RRF	%RSD	MEAN	QC LIMITS
	CS0.5	CS1	CS2	CS3	CS4	CS5				
2,3,7,8-TCDD	1.01	1.03	1.01	1.00	1.00	1.01	1.01	0.91	+/-20%	
2,3,7,8-TCDF	0.94	0.94	0.92	0.94	0.95	0.95	0.94	1.14	+/-20%	
1,2,3,7,8-PeCDF	0.95	1.01	0.99	0.98	1.00	1.00	0.99	2.15	+/-20%	
1,2,3,7,8-PeCDD	0.90	0.95	0.94	0.93	0.93	0.95	0.93	2.01	+/-20%	
2,3,4,7,8-PeCDF	0.89	0.94	0.94	0.94	0.95	0.94	0.93	2.35	+/-20%	
1,2,3,4,7,8-HxCDF	1.16	1.19	1.19	1.19	1.21	1.19	1.19	1.29	+/-20%	
1,2,3,6,7,8-HxCDF	1.08	1.14	1.13	1.13	1.14	1.13	1.13	2.02	+/-20%	
1,2,3,4,7,8-HxCDD	1.00	1.04	1.02	1.02	1.03	1.05	1.03	1.88	+/-20%	
1,2,3,6,7,8-HxCDD	0.96	1.04	1.02	1.03	1.03	1.05	1.02	2.99	+/-20%	
1,2,3,7,8,9-HxCDD	1.05	1.20	1.12	1.16	1.14	1.13	1.13	4.43	+/-20%	
2,3,4,6,7,8-HxCDF	1.07	1.16	1.12	1.11	1.13	1.11	1.12	2.62	+/-20%	
1,2,3,7,8,9-HxCDF	1.13	1.16	1.16	1.15	1.17	1.18	1.16	1.57	+/-20%	
1,2,3,4,6,7,8-HpCDF	1.35	1.40	1.37	1.36	1.37	1.39	1.37	1.42	+/-20%	
1,2,3,4,6,7,8-HpCDD	1.02	1.06	1.03	1.02	1.03	1.04	1.03	1.46	+/-20%	
1,2,3,4,7,8,9-HpCDF	1.25	1.30	1.29	1.28	1.30	1.30	1.29	1.41	+/-20%	
OCDD	1.11	1.15	1.11	1.10	1.11	1.10	1.11	1.59	+/-20%	
OCDF	1.21	1.30	1.24	1.26	1.29	1.25	1.26	2.48	+/-20%	
<b>Labeled Compounds</b>										
13C-2,3,7,8-TCDD	1.22	1.16	1.16	1.20	1.16	1.26	1.19	3.43	+/-35%	
13C-1,2,3,7,8-PeCDD	0.94	1.11	1.14	1.00	1.06	1.32	1.09	12.11	+/-35%	
13C-1,2,3,4,7,8-HxCDD	0.96	0.89	0.89	0.88	0.90	0.92	0.91	3.13	+/-35%	
13C-1,2,3,6,7,8-HxCDD	0.90	0.83	0.89	0.83	0.85	0.86	0.86	3.23	+/-35%	
13C-1,2,3,4,6,7,8-HpCDD	0.89	0.86	0.87	0.90	0.90	0.94	0.89	3.18	+/-35%	
13C-OCDD	0.61	0.63	0.60	0.64	0.66	0.70	0.64	5.58	+/-35%	
13C-2,3,7,8-TCDF	1.37	1.38	1.35	1.39	1.39	1.40	1.38	1.35	+/-35%	
13C-1,2,3,7,8-PeCDF	1.31	1.43	1.48	1.38	1.42	1.72	1.46	9.66	+/-35%	
13C-2,3,4,7,8-PeCDF	1.30	1.42	1.50	1.36	1.43	1.78	1.46	11.44	+/-35%	
13C-1,2,3,4,7,8-HxCDF	1.10	1.08	1.12	1.02	1.07	1.06	1.07	2.93	+/-35%	
13C-1,2,3,6,7,8-HxCDF	1.18	1.12	1.19	1.13	1.15	1.17	1.16	2.49	+/-35%	
13C-2,3,4,6,7,8-HxCDF	1.21	1.10	1.12	1.11	1.12	1.14	1.13	3.45	+/-35%	
13C-1,2,3,7,8,9-HxCDF	1.03	1.03	1.01	1.02	1.04	1.01	1.02	1.12	+/-35%	
13C-1,2,3,4,6,7,8-HpCDF	0.88	0.86	0.87	0.87	0.89	0.91	0.88	2.12	+/-35%	
13C-1,2,3,4,7,8,9-HpCDF	0.91	0.90	0.90	0.92	0.94	0.92	0.91	1.68	+/-35%	
37Cl-2,3,7,8-TCDD	1.31	1.25	1.22	1.26	1.22	1.33	1.26	3.49	+/-35%	

1.123789-HxCDD Relative Response (RR) is calculated based on the labeled analog of the other two HxCDDs.

2. OCDF RR is calculated based on the labeled analog of OCDD

USEPA - CLP  
6DFB6  
CDD/CDF INITIAL CALIBRATION ION ABUNDANCE RATIO SUMMARY  
HIGH RESOLUTION

Lab Name: ALS Environmental  
 Lab Code: ALSTX Case No.:  
 GC Column: DB-5MSUI ID: 0.25(mm)  
 Init. Calib. Date(s): 08/19/15  
 Init. Calib. Time.: 10:52

Contract No.:  
 TO No.: SDG No.:  
 Instrument ID: E-HRMS-08  
 Method

ION ABUNDANCE RATIO

Target Analytes	SELECTED IONS	ION ABUNDANCE RATIO						FLAG	ION RATIO QC LIMITS
		CS0.5	CS1	CS2	CS3	CS4	CS5		
2,3,7,8-TCDF	304/306	0.79	0.77	0.77	0.78	0.76	0.77		0.65-0.89
2,3,7,8-TCDD	320/322	0.76	0.78	0.78	0.78	0.78	0.78		0.65-0.89
1,2,3,7,8-PeCDF	340/342	1.59	1.55	1.55	1.55	1.55	1.51		1.32-1.78
2,3,4,7,8-PeCDF	340/342	1.59	1.59	1.56	1.56	1.54	1.48		1.32-1.78
1,2,3,7,8-PeCDD	356/358	1.53	1.56	1.57	1.55	1.56	1.56		1.32-1.78
1,2,3,4,7,8-HxCDF	374/376	1.22	1.22	1.19	1.22	1.22	1.15		1.05-1.43
1,2,3,6,7,8-HxCDF	374/376	1.27	1.23	1.20	1.24	1.24	1.18		1.05-1.43
2,3,4,6,7,8-HxCDF	374/376	1.24	1.24	1.22	1.22	1.23	1.15		1.05-1.43
1,2,3,7,8,9-HxCDF	374/376	1.23	1.25	1.21	1.24	1.23	1.21		1.05-1.43
1,2,3,4,7,8-HxCDD	390/392	1.22	1.28	1.25	1.25	1.24	1.25		1.05-1.43
1,2,3,6,7,8-HxCDD	390/392	1.21	1.24	1.24	1.25	1.24	1.25		1.05-1.43
1,2,3,7,8,9-HxCDD	390/392	1.28	1.31	1.26	1.24	1.25	1.25		1.05-1.43
1,2,3,4,6,7,8-HpCDF	408/410	1.02	1.02	1.04	1.02	1.01	1.02		0.88-1.20
1,2,3,4,7,8,9-HpCDF	408/410	1.00	1.01	1.02	1.02	1.03	1.03		0.88-1.20
1,2,3,4,6,7,8-HpCDD	424/426	1.01	1.04	1.02	1.05	1.04	1.04		0.88-1.20
OCDF	442/444	0.91	0.90	0.89	0.90	0.90	0.94		0.76-1.02
OCDD	458/460	0.88	0.88	0.90	0.89	0.89	0.90		0.76-1.02
13C-2,3,7,8-TCDD	332/334	0.79	0.79	0.79	0.78	0.79	0.79		0.65-0.89
13C-1,2,3,7,8-PeCDD	368/370	1.56	1.57	1.57	1.57	1.57	1.57		1.32-1.78
13C-1,2,3,4,7,8-HxCDD	402/404	1.26	1.27	1.27	1.26	1.26	1.26		1.05-1.43
13C-1,2,3,6,7,8-HxCDD	402/404	1.26	1.26	1.26	1.27	1.27	1.26		1.05-1.43
13C-1,2,3,4,6,7,8-HpCDD	436/438	1.05	1.06	1.06	1.05	1.06	1.06		0.88-1.20
13C-OCDD	470/472	0.90	0.90	0.90	0.90	0.89	0.90		0.76-1.02
13C-2,3,7,8-TCDF	316/318	0.79	0.79	0.79	0.79	0.79	0.79		0.65-0.89
13C-1,2,3,7,8-PeCDF	352/354	1.57	1.58	1.58	1.57	1.58	1.58		1.32-1.78
13C-2,3,4,7,8-PeCDF	352/354	1.57	1.58	1.58	1.59	1.58	1.58		1.32-1.78
13C-1,2,3,4,7,8-HxCDF	384/386	0.52	0.52	0.52	0.52	0.52	0.52		0.43-0.59
13C-1,2,3,6,7,8-HxCDF	384/386	0.52	0.53	0.52	0.52	0.52	0.52		0.43-0.59
13C-2,3,4,6,7,8-HxCDF	384/386	0.52	0.52	0.53	0.52	0.53	0.52		0.43-0.59
13C-1,2,3,7,8,9-HxCDF	384/386	0.52	0.52	0.52	0.52	0.52	0.52		0.43-0.59
13C-1,2,3,4,6,7,8-HpCDF	418/420	0.44	0.45	0.44	0.44	0.44	0.45		0.37-0.51
13C-1,2,3,4,7,8,9-HpCDF	418/420	0.45	0.45	0.45	0.44	0.45	0.44		0.37-0.51
13C-1,2,3,4,7,8-TCDD	332/334	0.79	0.79	0.80	0.79	0.79	0.79		0.65-0.89
13C-1,2,3,7,8,9-HxCDD	402/404	1.26	1.26	1.26	1.26	1.25	1.25		1.05-1.43

Quality Control (QC) limits represent +/- 15% window around the theoretical ion abundance ratio. The laboratory must flag any analyte in any calibration solution which does not meet the ion abundance ratio QC limit by placing an asterisk in the flag column.

ALS ENVIRONMENTAL  
Sample Response Summary

CLIENT ID.  
76554

Run #1      Filename P600004      Samp: 1      Inj: 1      Acquired: 19-AUG-15 12:31:21  
Processed: 19-AUG-15 16:14:16      Sample ID: CS0.5

Typ	Name	RT-1	Resp 1	Resp 2	Ratio	Meet	Mod?	RRF
1 Unk	2,3,7,8-TCDF	29:04	1.117e+03	1.416e+03	0.79	yes	no	0.941
2 Unk	1,2,3,7,8-PeCDF	33:03	7.510e+03	4.712e+03	1.59	yes	no	0.987
3 Unk	2,3,4,7,8-PeCDF	33:55	6.945e+03	4.373e+03	1.59	yes	no	0.934
4 Unk	1,2,3,4,7,8-HxCDF	36:30	5.825e+03	4.782e+03	1.22	yes	no	1.189
5 Unk	1,2,3,6,7,8-HxCDF	36:37	5.972e+03	4.720e+03	1.27	yes	no	1.126
6 Unk	2,3,4,6,7,8-HxCDF	37:06	5.975e+03	4.815e+03	1.24	yes	no	1.116
7 Unk	1,2,3,7,8,9-HxCDF	37:50	5.354e+03	4.348e+03	1.23	yes	no	1.158
8 Unk	1,2,3,4,6,7,8-HpCDF	39:04	5.016e+03	4.919e+03	1.02	yes	no	1.373
9 Unk	1,2,3,4,7,8,9-HpCDF	40:30	4.739e+03	4.724e+03	1.00	yes	no	1.287
10 Unk	OCDF	43:04	5.845e+03	6.423e+03	0.91	yes	no	1.257
11 Unk	2,3,7,8-TCDD	29:48	1.037e+03	1.371e+03	0.76	yes	no	1.010
12 Unk	1,2,3,7,8-PeCDD	34:12	4.987e+03	3.252e+03	1.53	yes	no	0.932
13 Unk	1,2,3,4,7,8-HxCDD	37:14	4.362e+03	3.576e+03	1.22	yes	no	1.026
14 Unk	1,2,3,6,7,8-HxCDD	37:18	3.954e+03	3.266e+03	1.21	yes	no	1.021
15 Unk	1,2,3,7,8,9-HxCDD	37:32	4.546e+03	3.539e+03	1.28	yes	no	1.133
16 Unk	1,2,3,4,6,7,8-HpCDD	40:01	3.801e+03	3.761e+03	1.01	yes	no	1.034
17 Unk	OCDD	42:52	5.248e+03	5.994e+03	0.88	yes	no	1.111
18 IS	13C-2,3,7,8-TCDF	29:03	4.752e+05	5.998e+05	0.79	yes	no	1.379
19 IS	13C-1,2,3,7,8-PeCDF	33:03	6.283e+05	4.004e+05	1.57	yes	no	1.456
20 IS	13C-2,3,4,7,8-PeCDF	33:55	6.205e+05	3.964e+05	1.57	yes	no	1.465
21 IS	13C-1,2,3,4,7,8-HxCDF	36:30	2.506e+05	4.797e+05	0.52	yes	no	1.075
22 IS	13C-1,2,3,6,7,8-HxCDF	36:36	2.713e+05	5.186e+05	0.52	yes	no	1.158
23 IS	13C-2,3,4,6,7,8-HxCDF	37:05	2.767e+05	5.291e+05	0.52	yes	no	1.133
24 IS	13C-1,2,3,7,8,9-HxCDF	37:50	2.351e+05	4.532e+05	0.52	yes	no	1.024
25 IS	13C-1,2,3,4,6,7,8-HpCDF	39:04	1.809e+05	4.065e+05	0.44	yes	no	0.880
26 IS	13C-1,2,3,4,7,8,9-HpCDF	40:29	1.859e+05	4.177e+05	0.45	yes	no	0.914
27 IS	13C-2,3,7,8-TCDD	29:48	4.212e+05	5.354e+05	0.79	yes	no	1.193
28 IS	13C-1,2,3,7,8-PeCDD	34:11	4.478e+05	2.864e+05	1.56	yes	no	1.094
29 IS	13C-1,2,3,4,7,8-HxCDD	37:13	3.553e+05	2.821e+05	1.26	yes	no	0.906
30 IS	13C-1,2,3,6,7,8-HxCDD	37:18	3.347e+05	2.651e+05	1.26	yes	no	0.860
31 IS	13C-1,2,3,4,6,7,8-HpCDD	39:59	3.052e+05	2.899e+05	1.05	yes	no	0.892
32 IS	13C-OCDD	42:51	3.843e+05	4.272e+05	0.90	yes	no	0.642
33 RS/RT	13C-1,2,3,4-TCDD	29:15	3.458e+05	4.378e+05	0.79	yes	no	-
34 RS/RT	13C-1,2,3,7,8,9-HxCDD	37:32	3.710e+05	2.956e+05	1.26	yes	no	-
35 C/Up	37Cl-2,3,7,8-TCDD	29:48	2.559e+03				no	1.263

---

ALS ENVIRONMENTAL  
10450 Stancliff Rd, Suite 115  
Houston, TX 77099  
Office (713) 266-1599. Fax (713) 266-0130

[www.alsglobal.com](http://www.alsglobal.com)

ALS ENVIRONMENTAL  
Signal/Noise Height Ratio Summary

CLIENT ID.  
76554

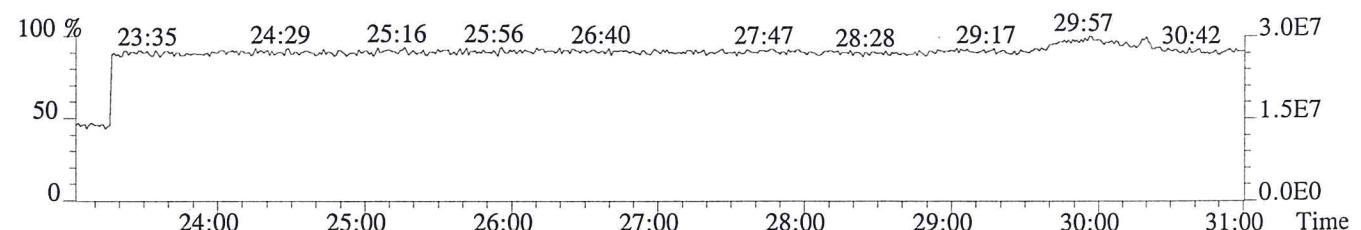
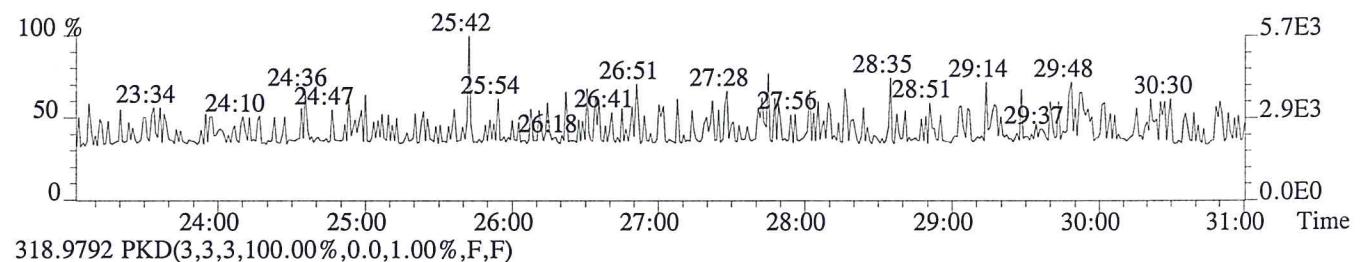
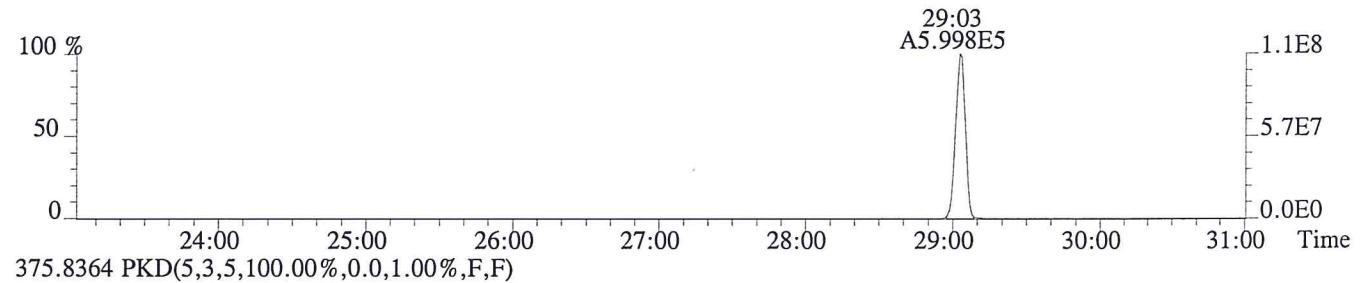
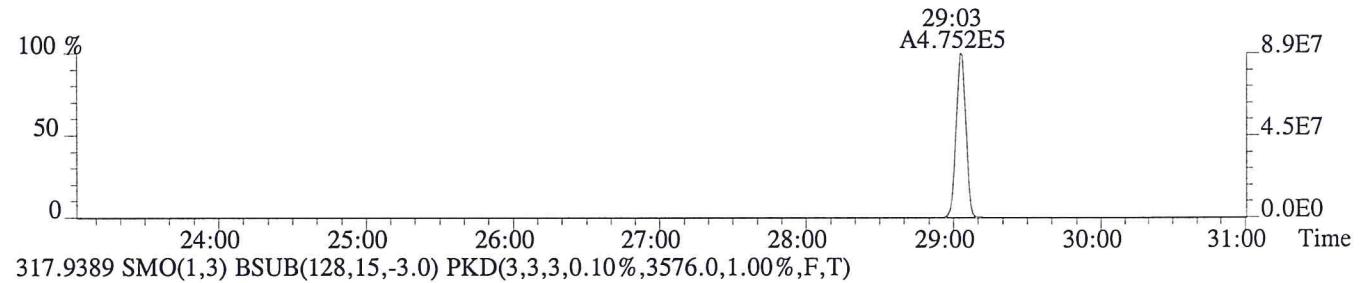
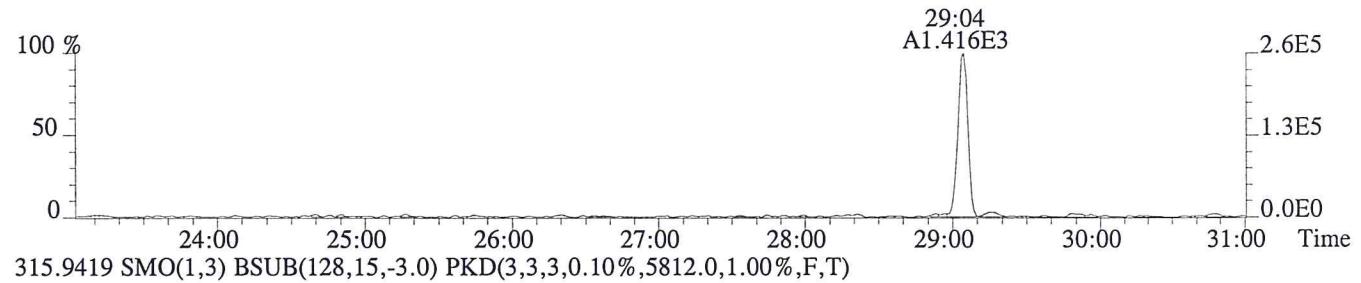
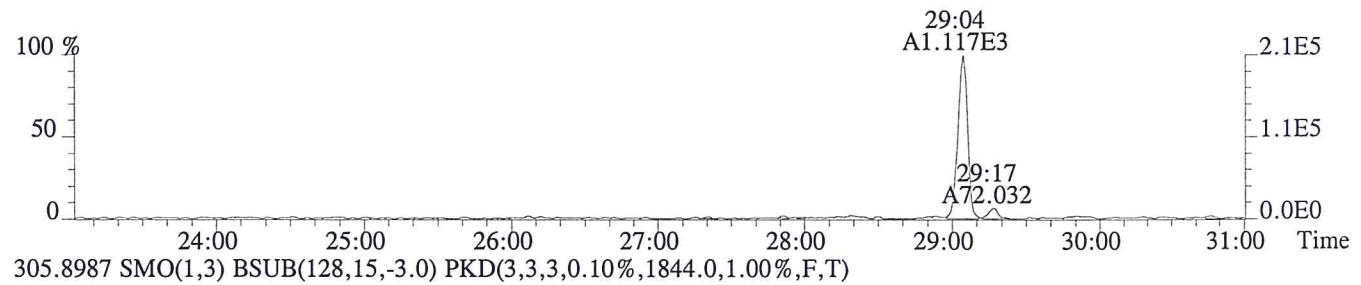
Run #1   Filename P600004               Samp: 1    Inj: 1           Acquired: 19-AUG-15 12:31:21  
Processed: 19-AUG-15 16:14:16           LAB. ID: CS0.5

	Name	Signal 1	Noise 1	S/N Rat.1	Signal 2	Noise 2	S/N Rat.2
1	2,3,7,8-TCDF	2.10e+05	1.90e+03	1.1e+02	2.58e+05	1.84e+03	1.4e+02
2	1,2,3,7,8-PeCDF	1.49e+06	1.84e+03	8.1e+02	9.38e+05	3.10e+03	3.0e+02
3	2,3,4,7,8-PeCDF	1.42e+06	1.84e+03	7.7e+02	8.87e+05	3.10e+03	2.9e+02
4	1,2,3,4,7,8-HxCDF	1.28e+06	2.02e+03	6.3e+02	1.05e+06	6.08e+02	1.7e+03
5	1,2,3,6,7,8-HxCDF	1.30e+06	2.02e+03	6.4e+02	1.04e+06	6.08e+02	1.7e+03
6	2,3,4,6,7,8-HxCDF	1.37e+06	2.02e+03	6.8e+02	1.08e+06	6.08e+02	1.8e+03
7	1,2,3,7,8,9-HxCDF	1.15e+06	2.02e+03	5.7e+02	9.32e+05	6.08e+02	1.5e+03
8	1,2,3,4,6,7,8-HpCDF	1.10e+06	1.84e+03	5.9e+02	1.10e+06	1.67e+03	6.6e+02
9	1,2,3,4,7,8,9-HpCDF	1.01e+06	1.84e+03	5.5e+02	9.84e+05	1.67e+03	5.9e+02
10	OCDF	1.06e+06	1.48e+03	7.2e+02	1.16e+06	2.44e+03	4.8e+02
11	2,3,7,8-TCDD	2.09e+05	1.95e+03	1.1e+02	2.78e+05	2.54e+03	1.1e+02
12	1,2,3,7,8-PeCDD	1.02e+06	3.83e+03	2.7e+02	6.47e+05	2.19e+03	3.0e+02
13	1,2,3,4,7,8-HxCDD	9.98e+05	1.84e+03	5.4e+02	8.15e+05	2.27e+03	3.6e+02
14	1,2,3,6,7,8-HxCDD	8.80e+05	1.84e+03	4.8e+02	7.43e+05	2.27e+03	3.3e+02
15	1,2,3,7,8,9-HxCDD	9.63e+05	1.84e+03	5.2e+02	7.66e+05	2.27e+03	3.4e+02
16	1,2,3,4,6,7,8-HpCDD	7.79e+05	1.88e+03	4.1e+02	7.55e+05	8.00e+02	9.4e+02
17	OCDD	9.49e+05	1.08e+03	8.8e+02	1.09e+06	1.89e+03	5.8e+02
18	13C-2,3,7,8-TCDF	8.93e+07	5.81e+03	1.5e+04	1.13e+08	3.58e+03	3.2e+04
19	13C-1,2,3,7,8-PeCDF	1.22e+08	1.62e+03	7.5e+04	7.74e+07	2.34e+03	3.3e+04
20	13C-2,3,4,7,8-PeCDF	1.24e+08	1.62e+03	7.7e+04	7.87e+07	2.34e+03	3.4e+04
21	13C-1,2,3,4,7,8-HxCDF	5.47e+07	1.35e+03	4.1e+04	1.05e+08	3.21e+03	3.3e+04
22	13C-1,2,3,6,7,8-HxCDF	5.98e+07	1.35e+03	4.4e+04	1.14e+08	3.21e+03	3.6e+04
23	13C-2,3,4,6,7,8-HxCDF	6.16e+07	1.35e+03	4.6e+04	1.19e+08	3.21e+03	3.7e+04
24	13C-1,2,3,7,8,9-HxCDF	5.06e+07	1.35e+03	3.8e+04	9.74e+07	3.21e+03	3.0e+04
25	13C-1,2,3,4,6,7,8-HpCDF	3.88e+07	9.26e+03	4.2e+03	8.85e+07	1.02e+04	8.7e+03
26	13C-1,2,3,4,7,8,9-HpCDF	3.87e+07	9.26e+03	4.2e+03	8.73e+07	1.02e+04	8.6e+03
27	13C-2,3,7,8-TCDD	8.43e+07	9.59e+03	8.8e+03	1.07e+08	5.35e+03	2.0e+04
28	13C-1,2,3,7,8-PeCDD	9.07e+07	2.35e+03	3.9e+04	5.81e+07	2.18e+03	2.7e+04
29	13C-1,2,3,4,7,8-HxCDD	8.00e+07	6.37e+03	1.3e+04	6.32e+07	2.40e+03	2.6e+04
30	13C-1,2,3,6,7,8-HxCDD	7.39e+07	6.37e+03	1.2e+04	5.94e+07	2.40e+03	2.5e+04
31	13C-1,2,3,4,6,7,8-HpCDD	6.27e+07	1.40e+03	4.5e+04	6.02e+07	8.36e+02	7.2e+04
32	13C-OCDD	7.03e+07	1.26e+03	5.6e+04	7.87e+07	1.65e+03	4.8e+04
33	13C-1,2,3,4-TCDD	6.67e+07	9.59e+03	7.0e+03	8.50e+07	5.35e+03	1.6e+04
34	13C-1,2,3,7,8,9-HxCDD	8.19e+07	6.37e+03	1.3e+04	6.60e+07	2.40e+03	2.7e+04
35	37Cl-2,3,7,8-TCDD	5.20e+05	3.14e+03	1.7e+02			

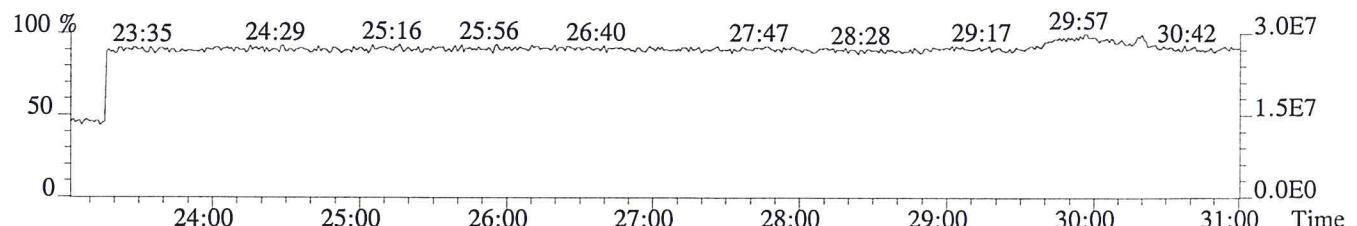
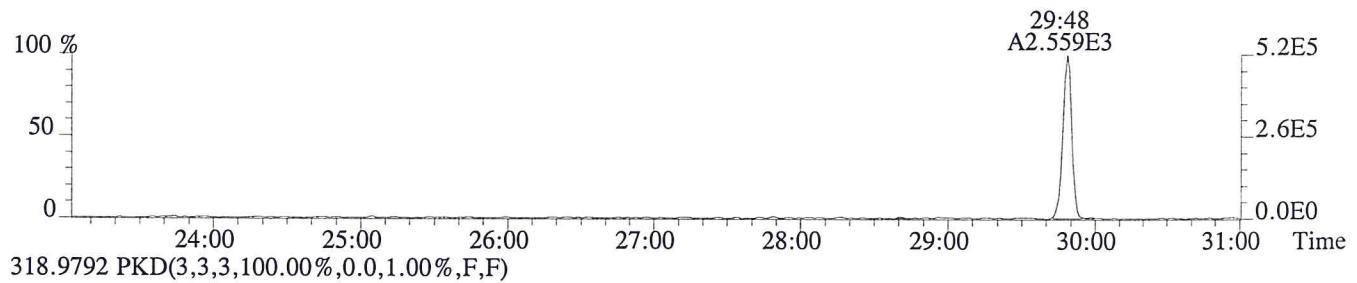
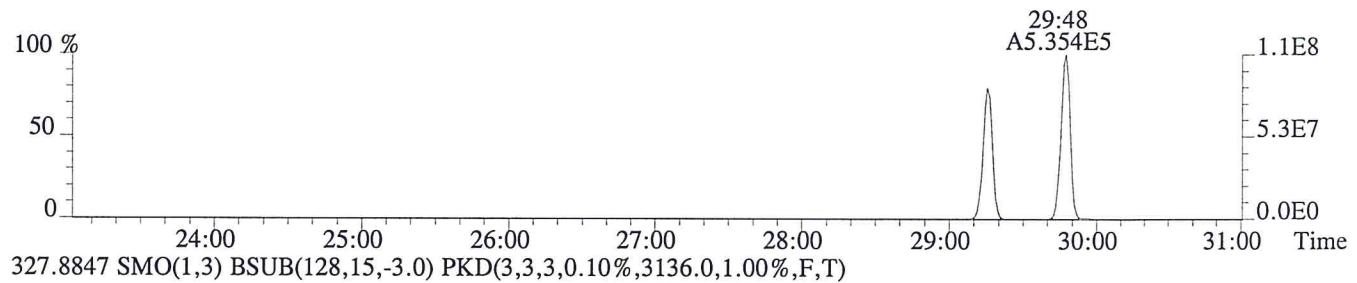
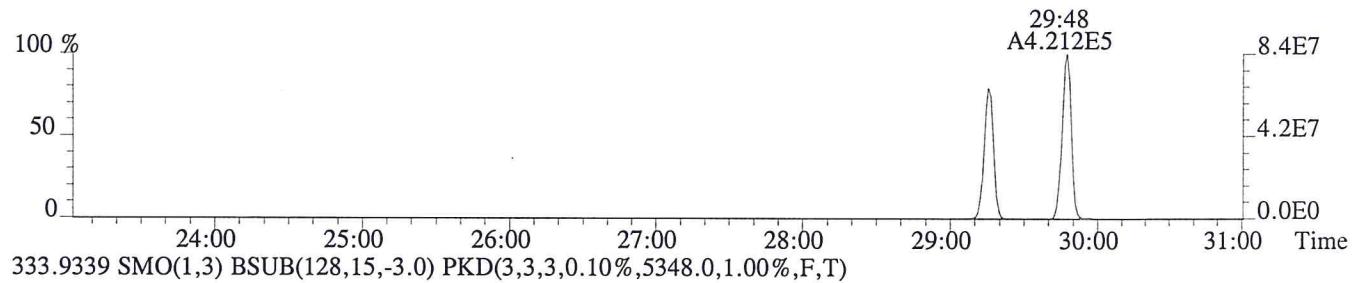
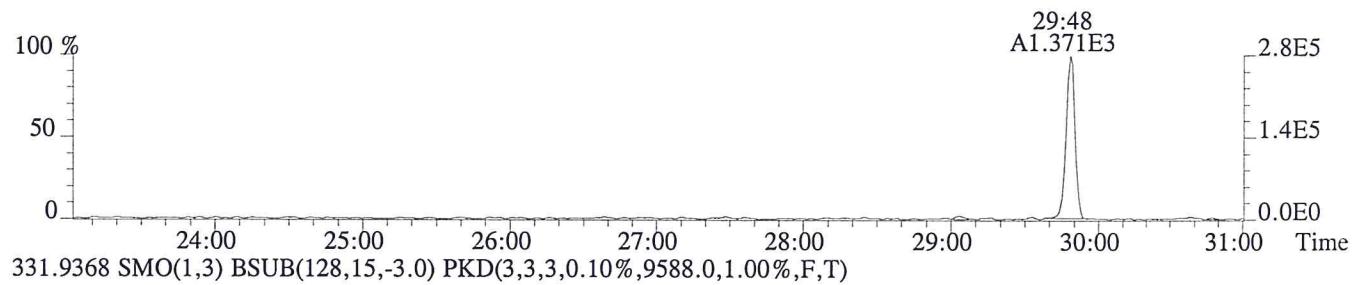
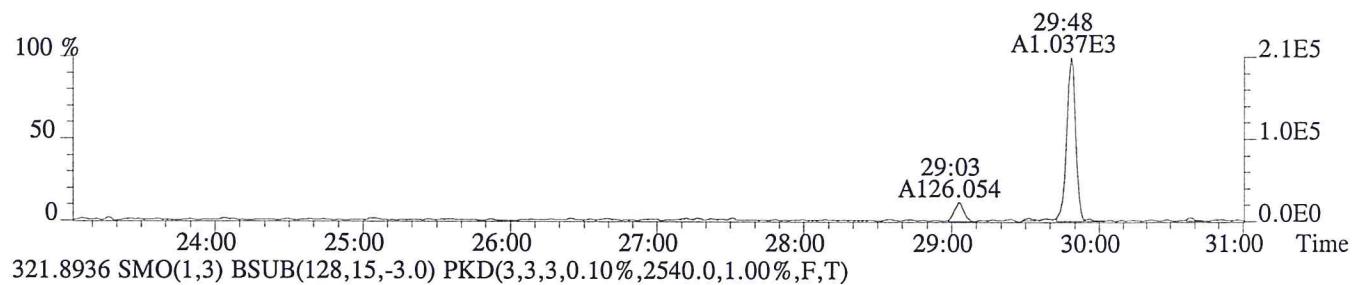
---

ALS ENVIRONMENTAL  
10450 Stancliff Rd., Suite 115  
Houston, TX 77099  
Office: (713) 266-1599. Fax: (713) 266-0130

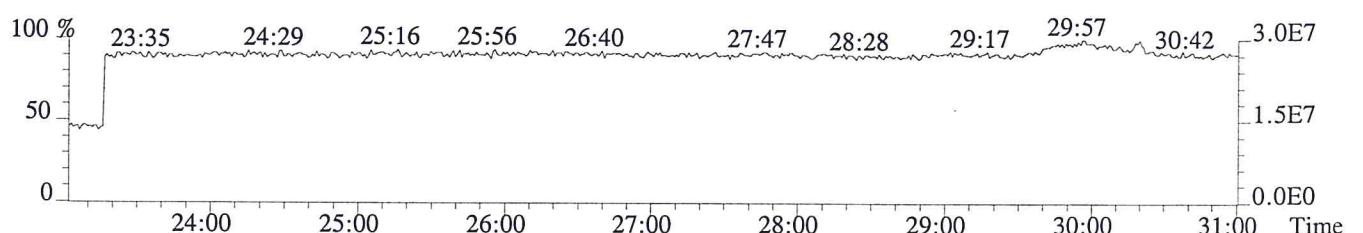
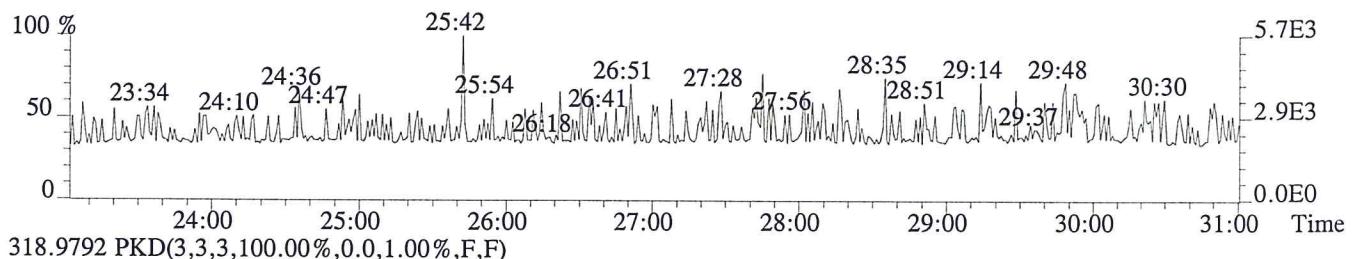
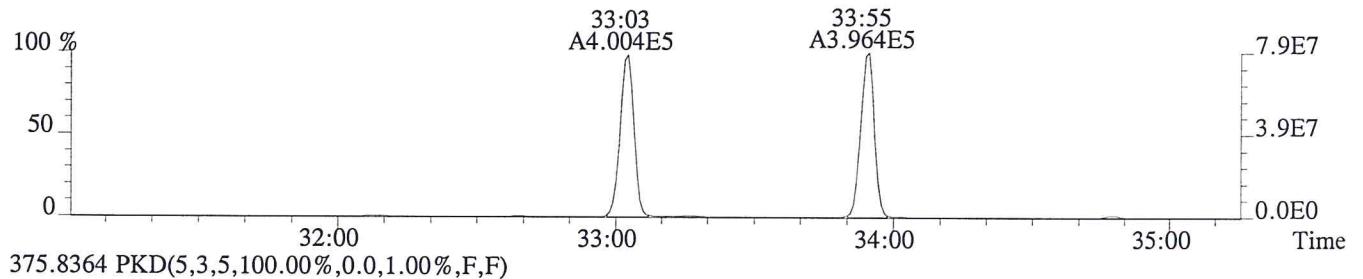
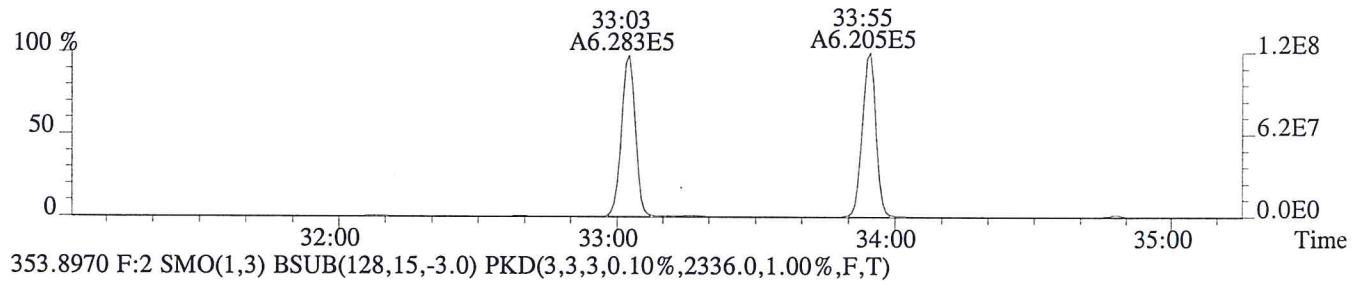
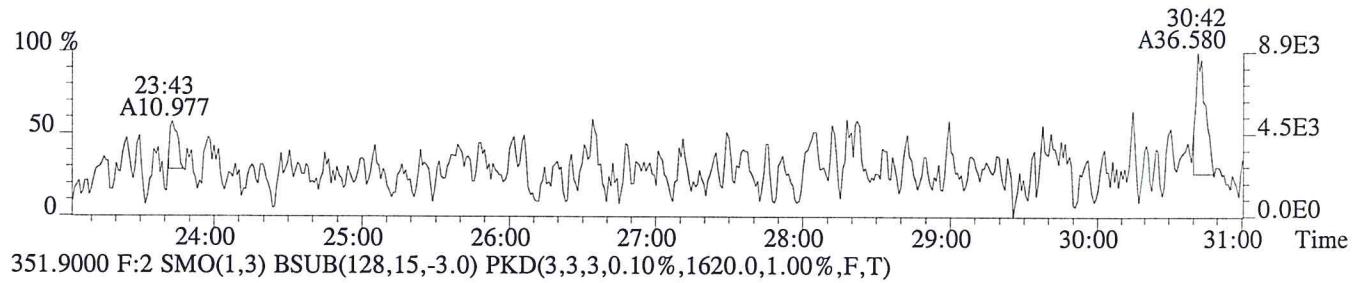
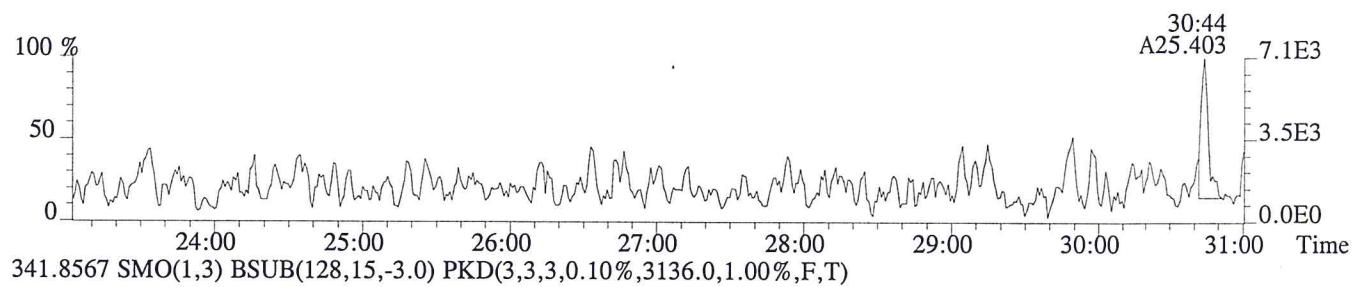
File:P600004 #1-566 Acq:19-AUG-2015 12:31:21 Probe EI+ Magnet SIR VG BioTech Mass spect<sup>L</sup>  
 Sample#1 Exp:CS0.5  
 303.9016 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1896.0,1.00%,F,T)



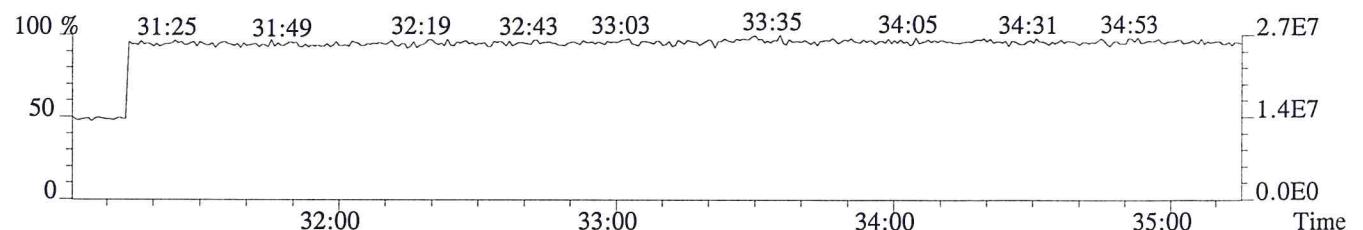
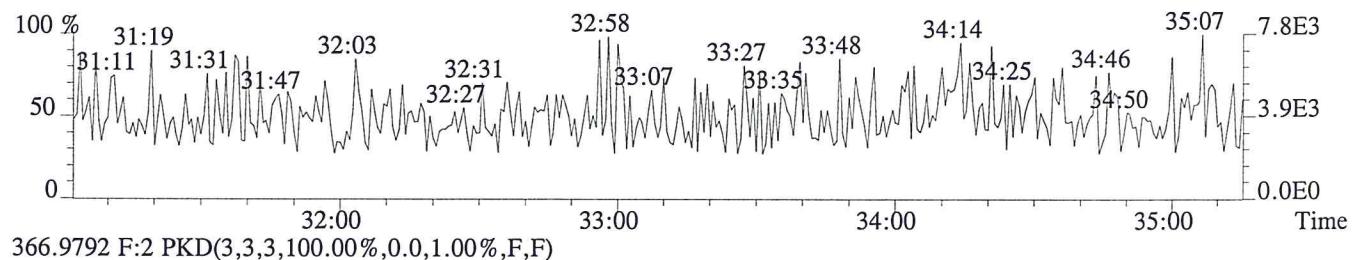
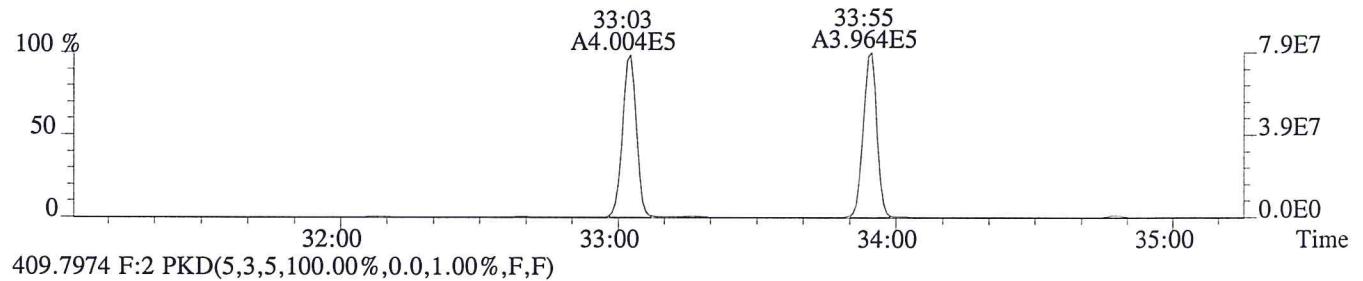
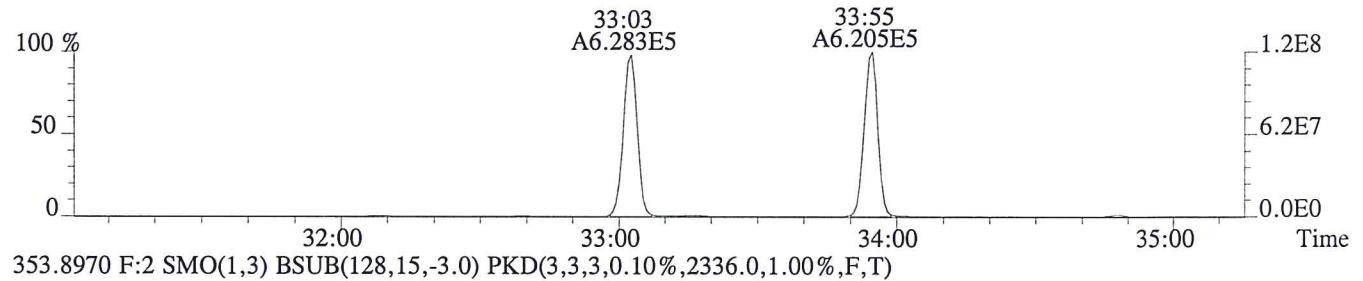
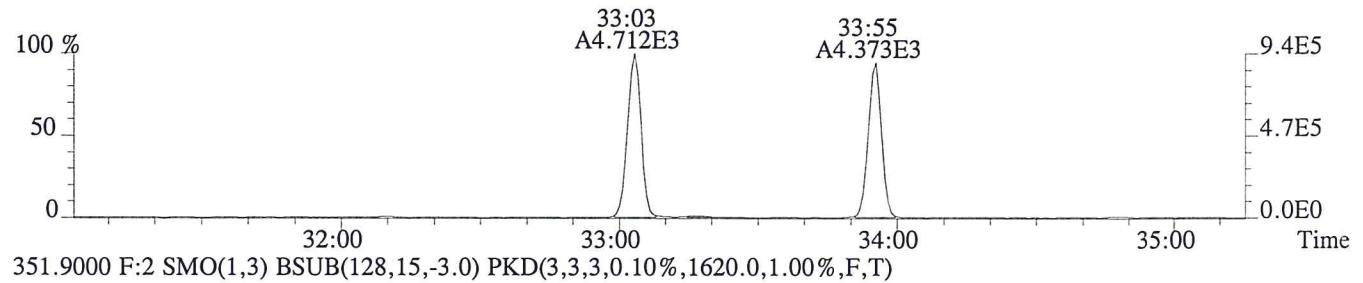
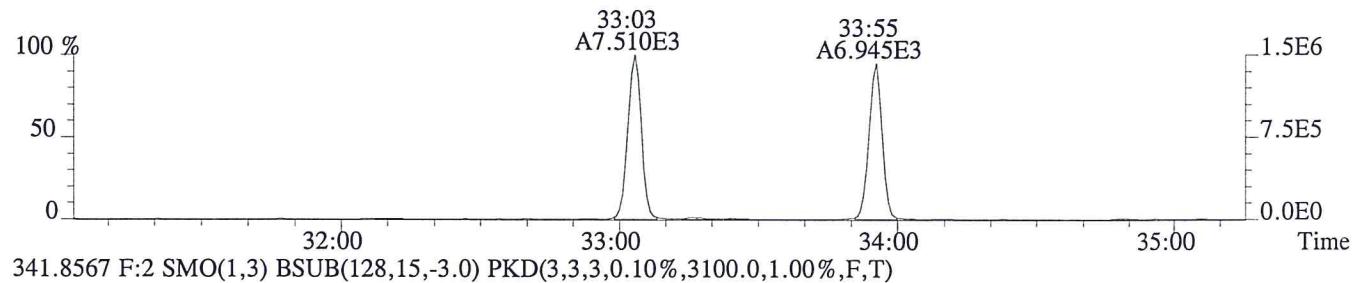
File:P600004 #1-566 Acq:19-AUG-2015 12:31:21 Probe EI+ Magnet SIR VG BioTech Mass spect&  
 Sample#1 Exp:CS0.5  
 319.8965 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1948.0,1.00%,F,T)



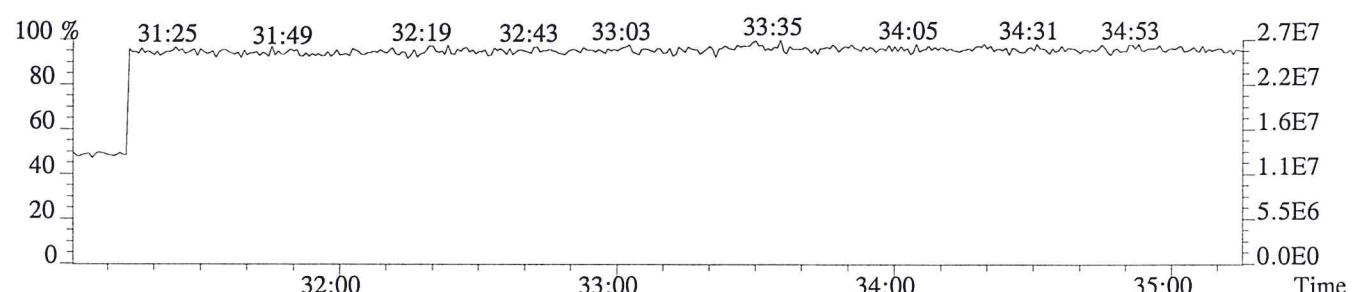
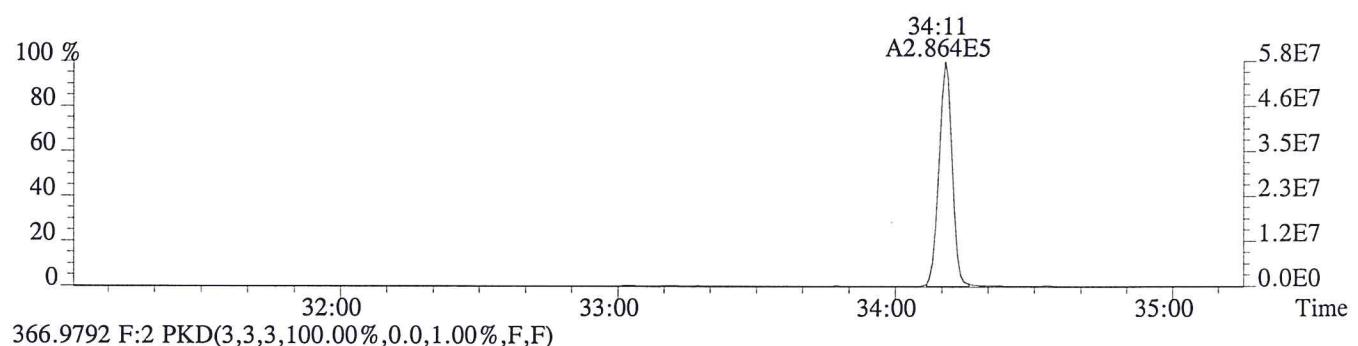
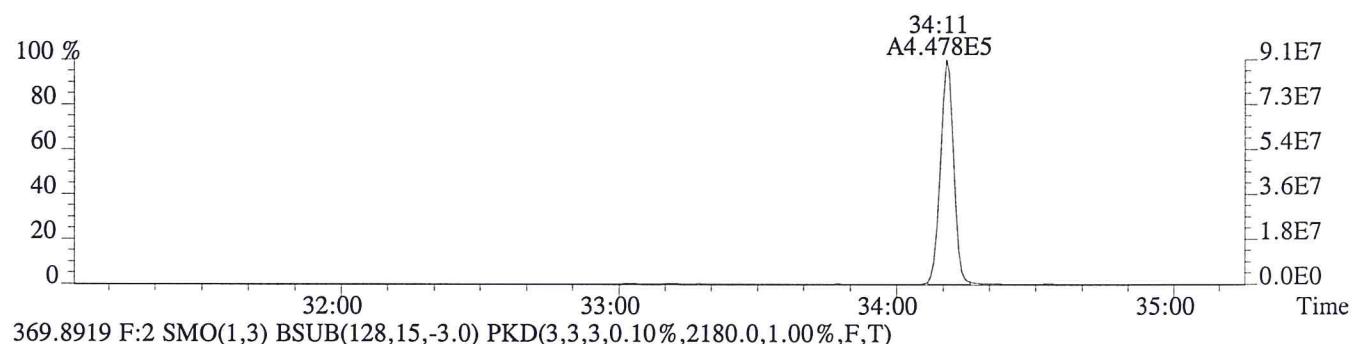
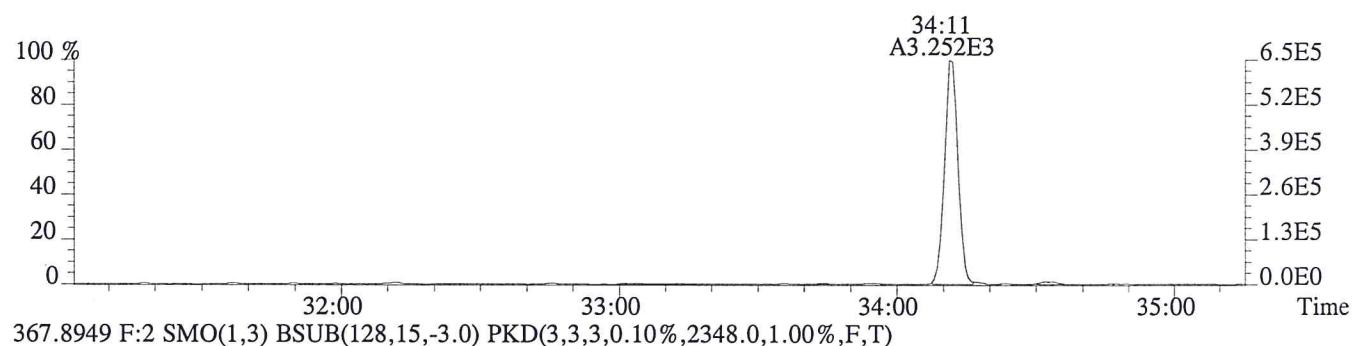
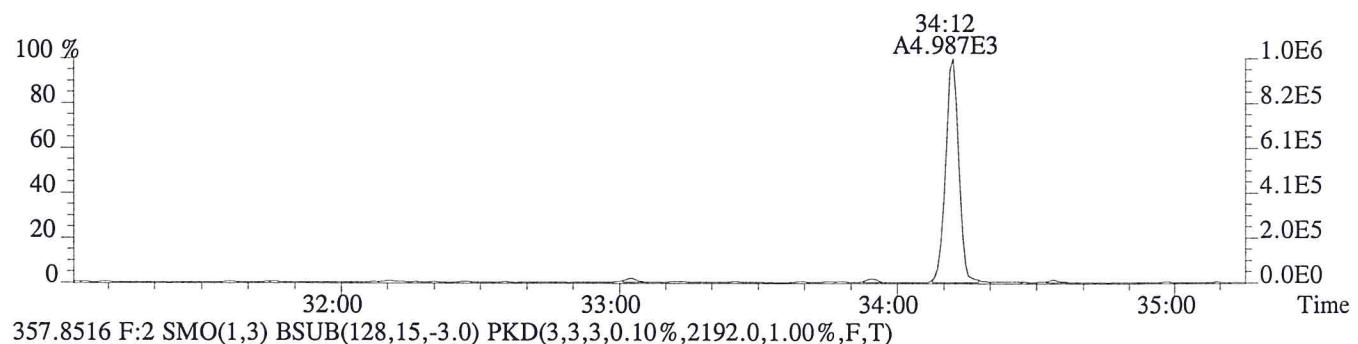
File:P600004 #1-566 Acq:19-AUG-2015 12:31:21 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:CS0.5  
 339.8597 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1760.0,1.00%,F,T)



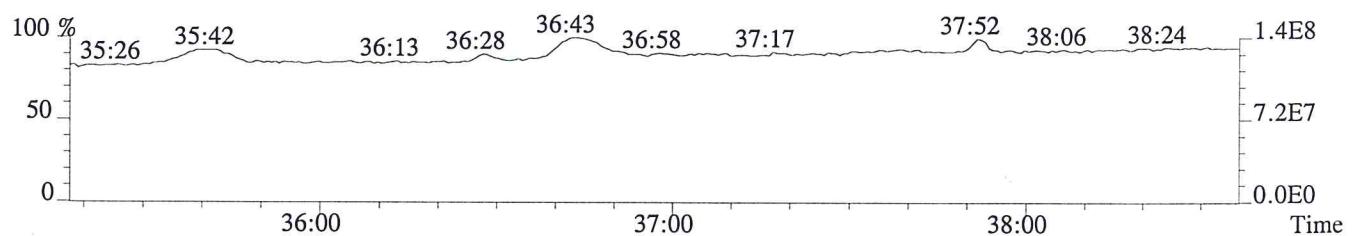
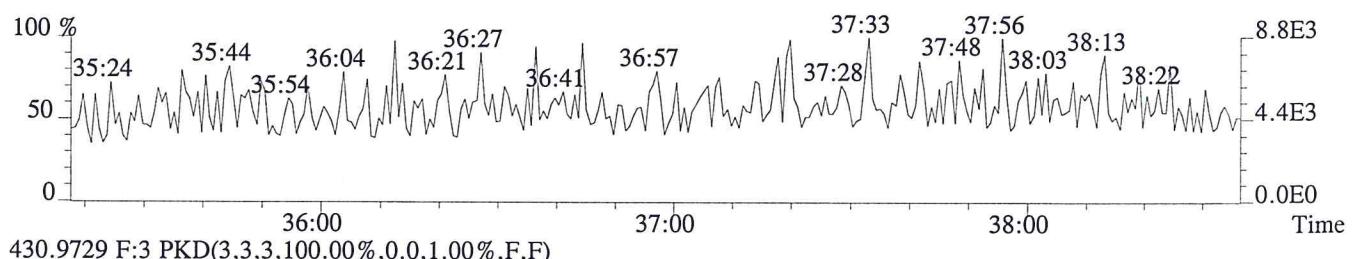
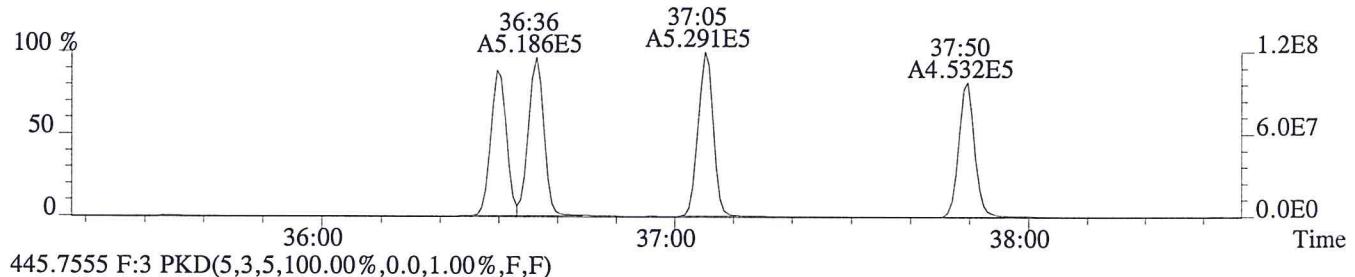
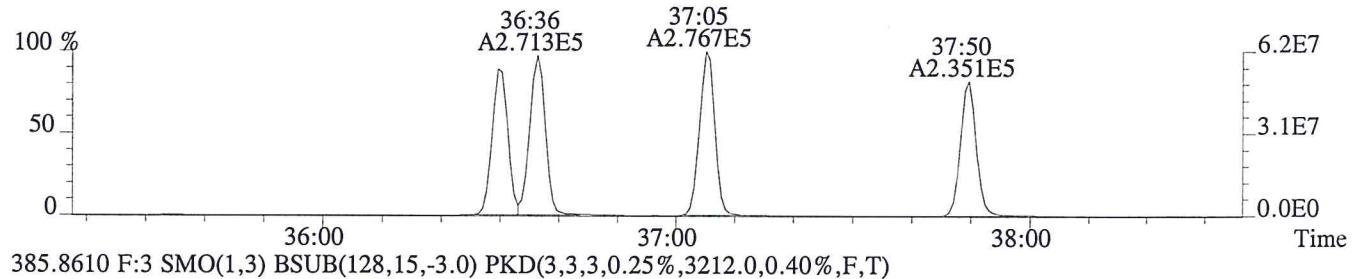
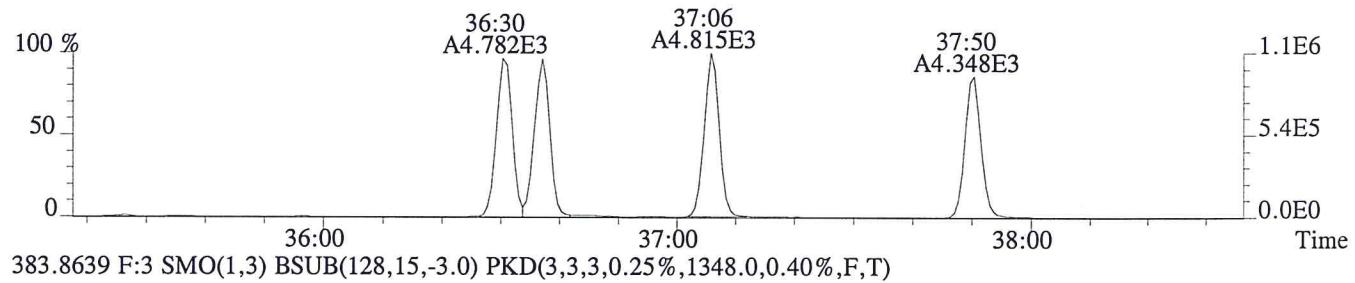
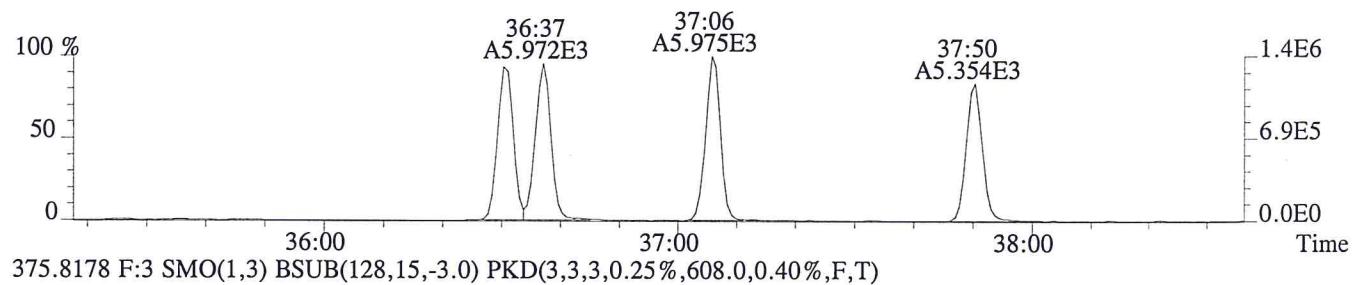
File:P600004 #1-380 Acq:19-AUG-2015 12:31:21 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:CS0.5  
 339.8597 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1844.0,1.00%,F,T)



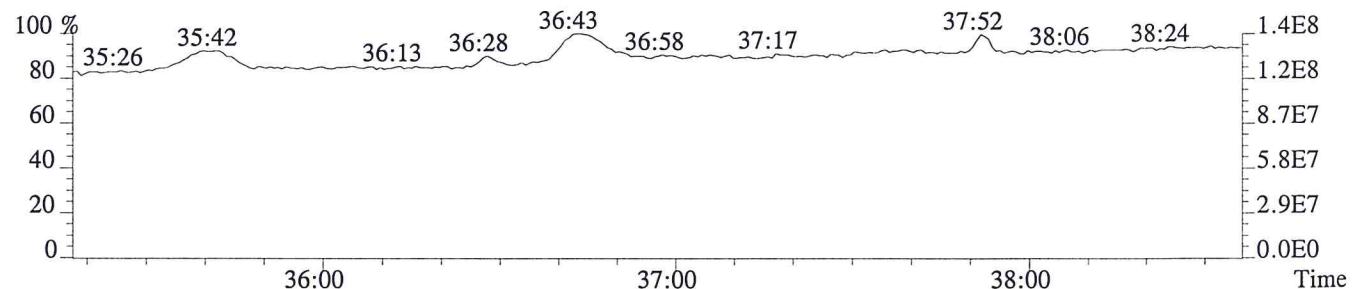
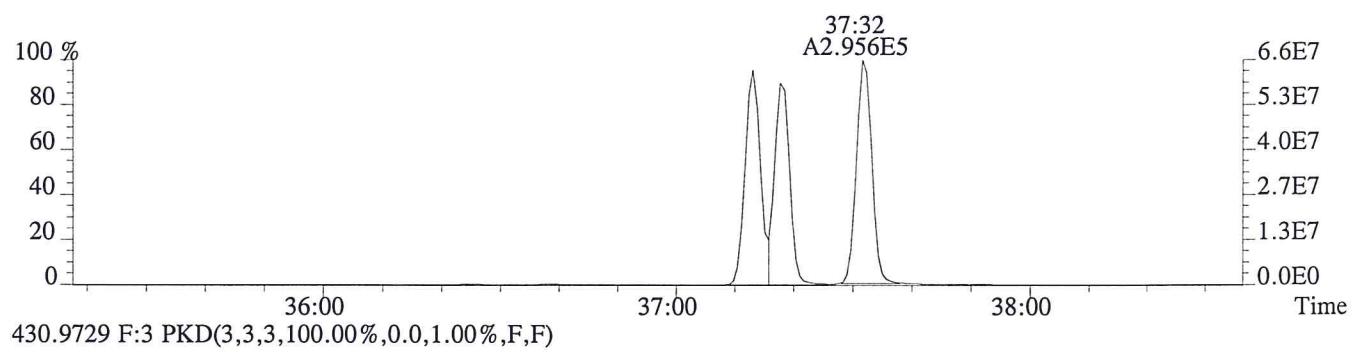
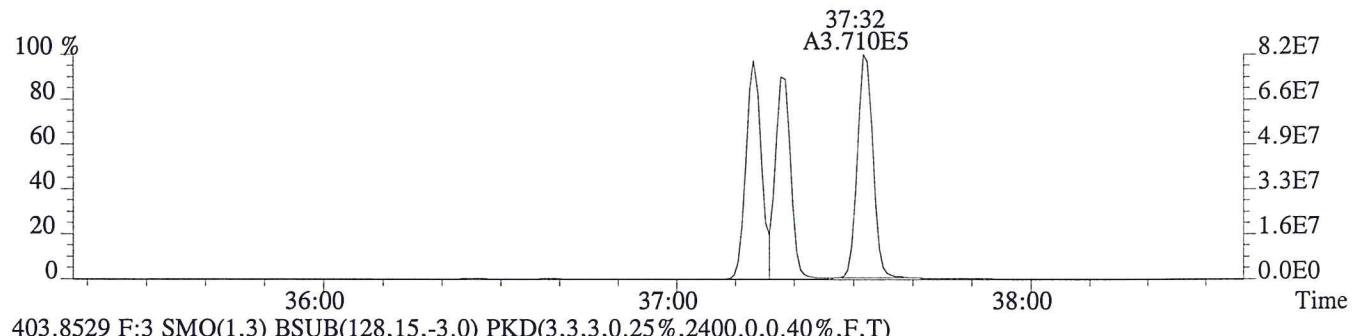
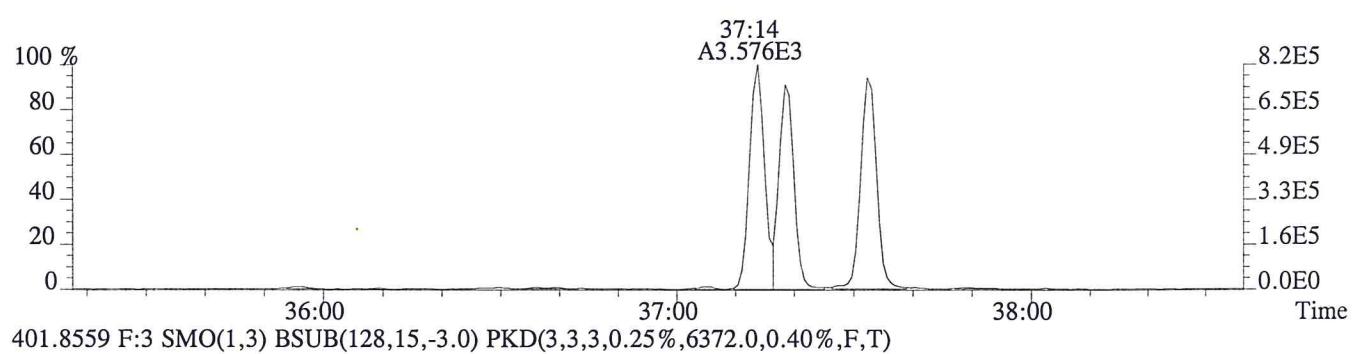
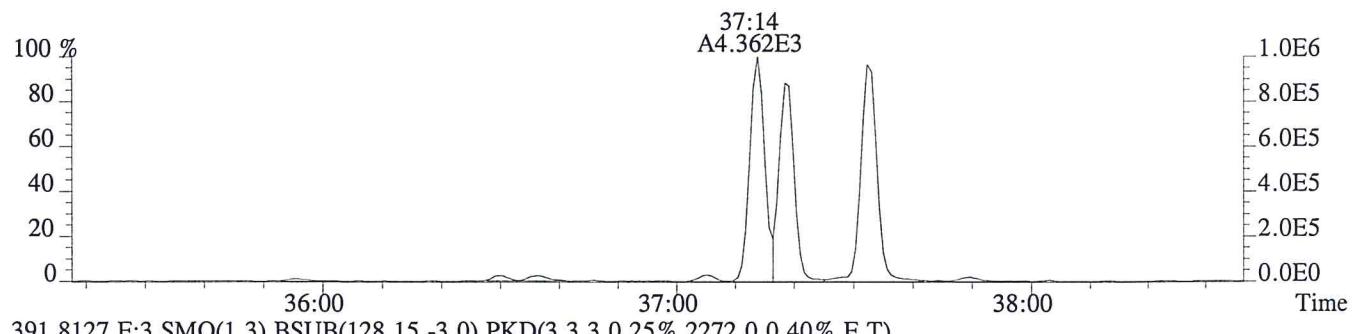
File:P600004 #1-380 Acq:19-AUG-2015 12:31:21 Probe EI+ Magnet SIR VG BioTech Mass spectf  
Sample#1 Exp:CS0.5  
355.8546 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,3832.0,1.00%,F,T)



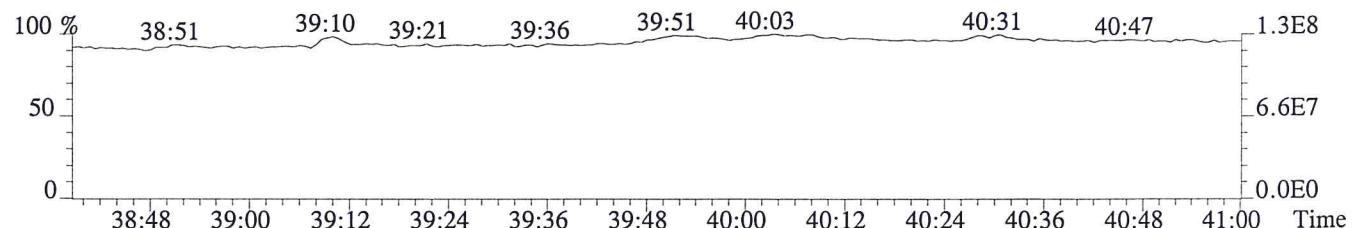
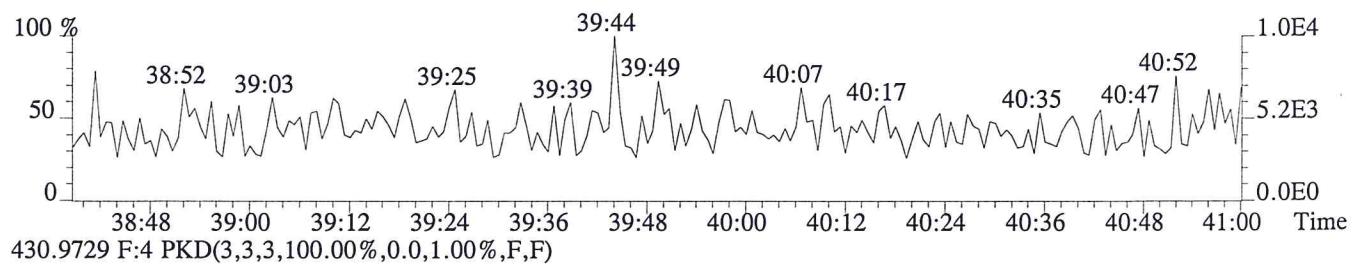
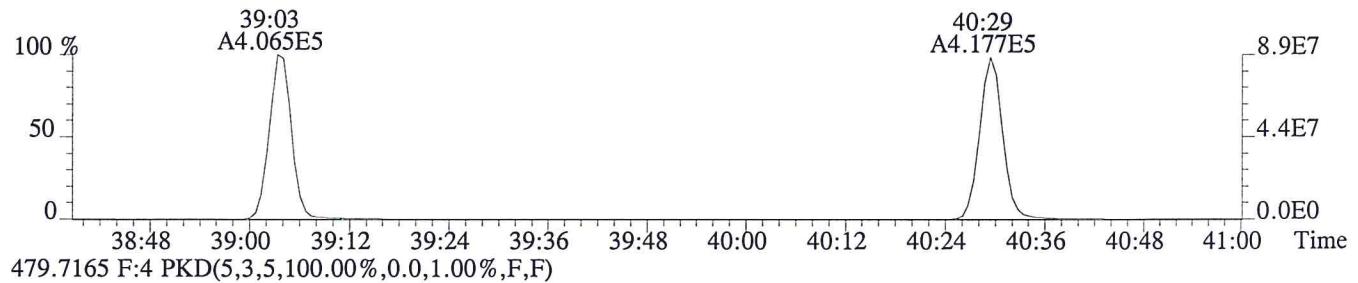
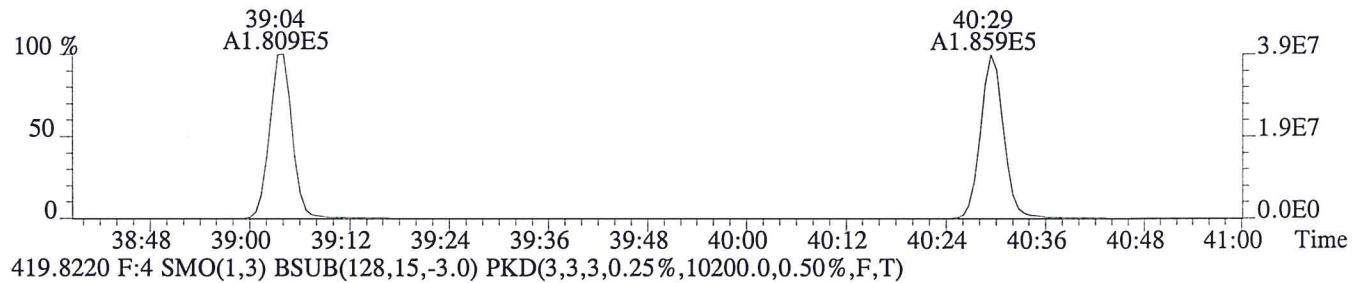
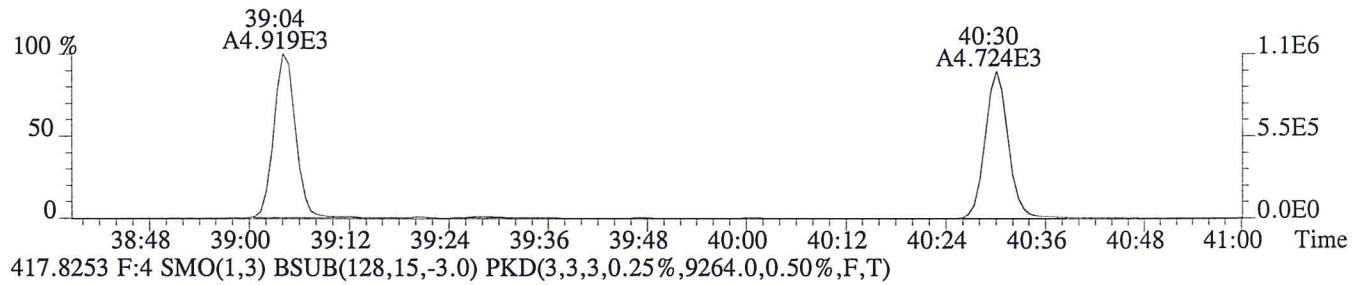
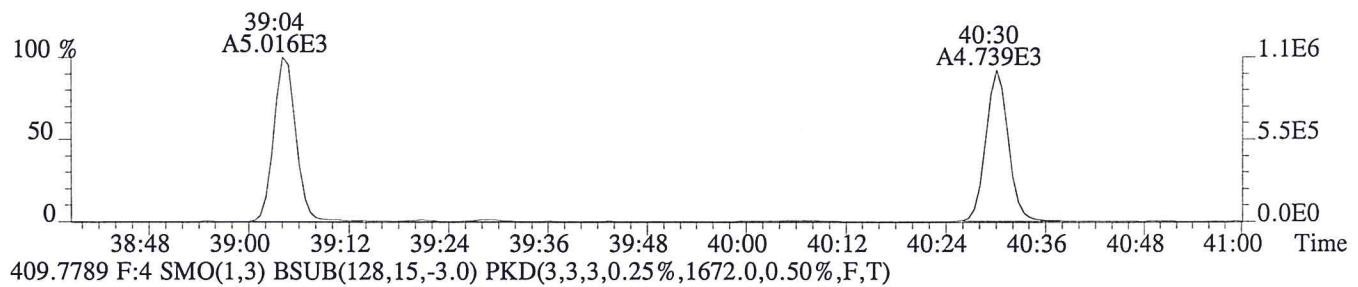
File:P600004 #1-299 Acq:19-AUG-2015 12:31:21 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:CS0.5  
 373.8208 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,2020.0,0.40%,F,T)



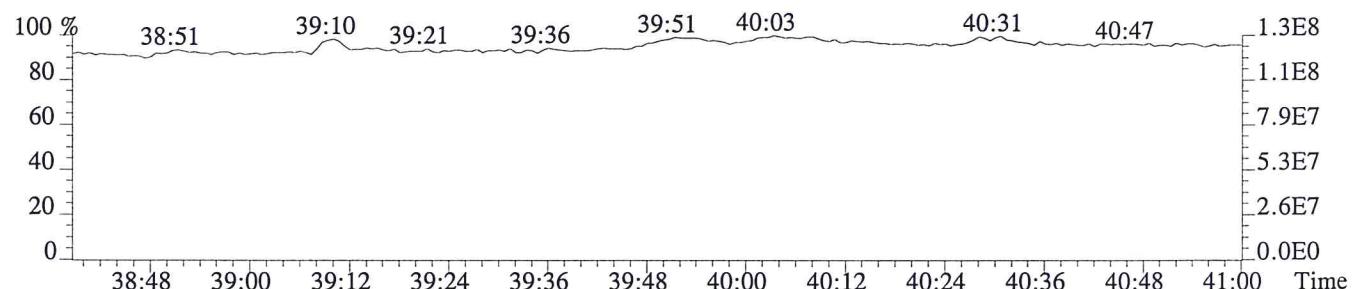
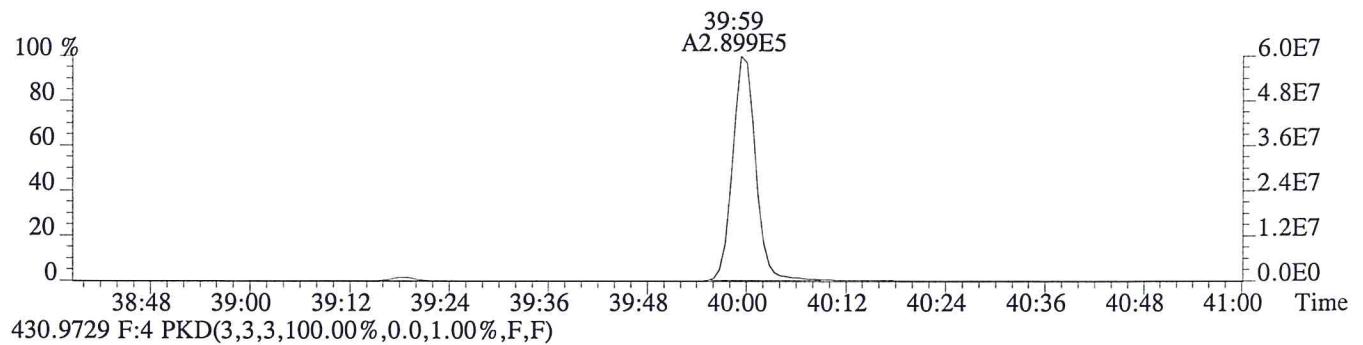
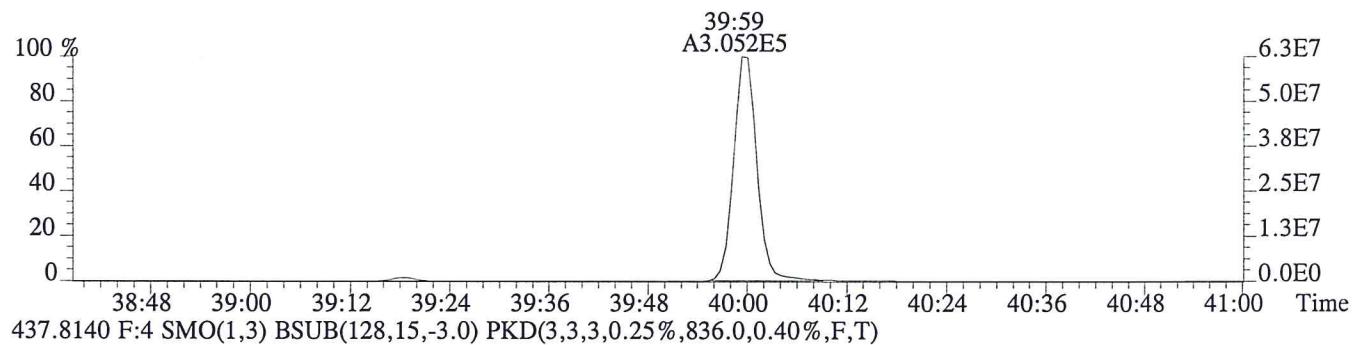
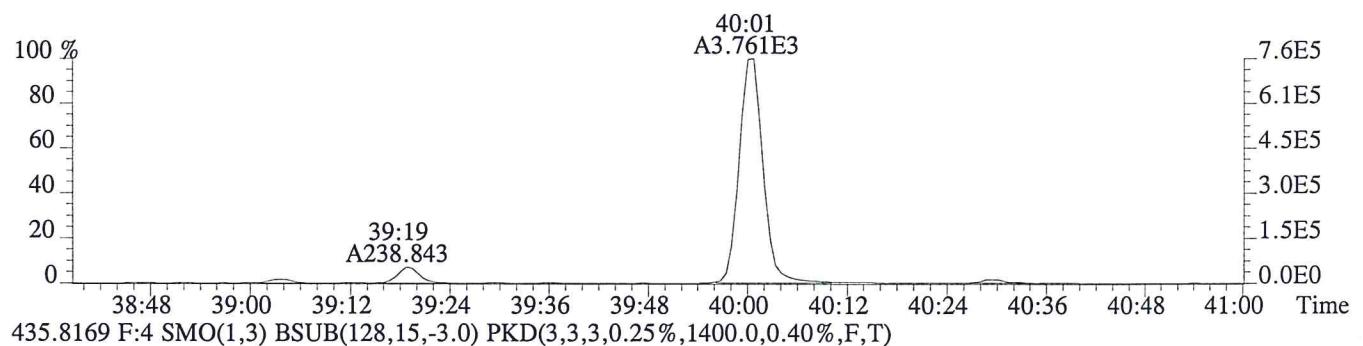
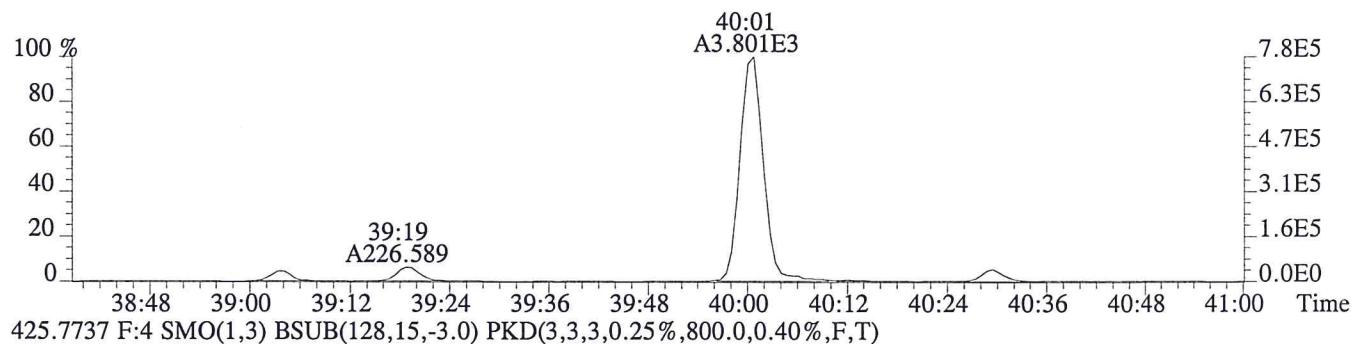
File:P600004 #1-299 Acq:19-AUG-2015 12:31:21 Probe EI+ Magnet SIR VG BioTech Mass spect&  
 Sample#1 Exp:CS0.5  
 389.8157 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1844.0,0.40%,F,T)



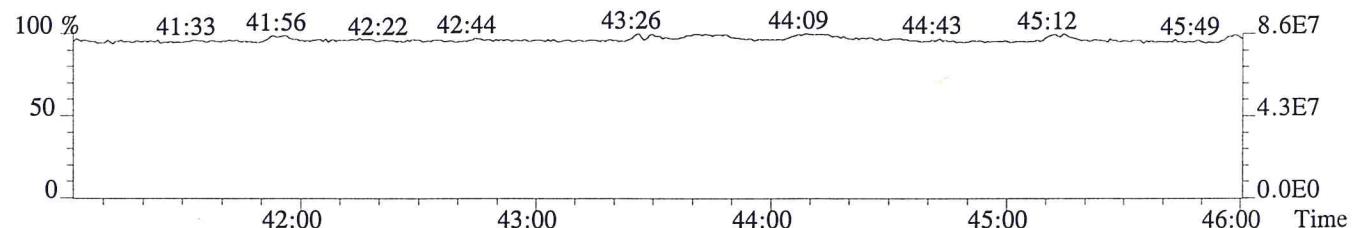
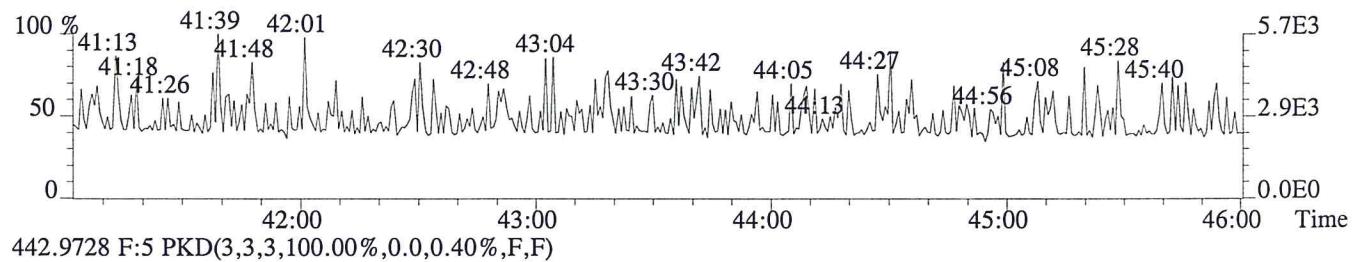
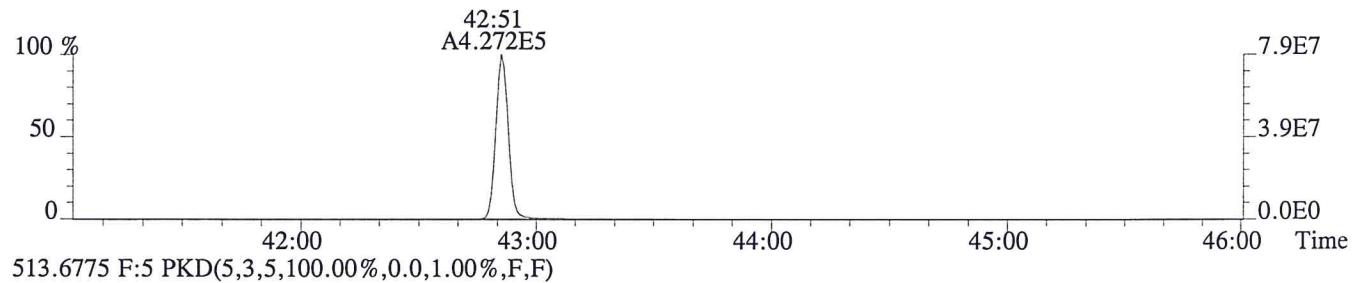
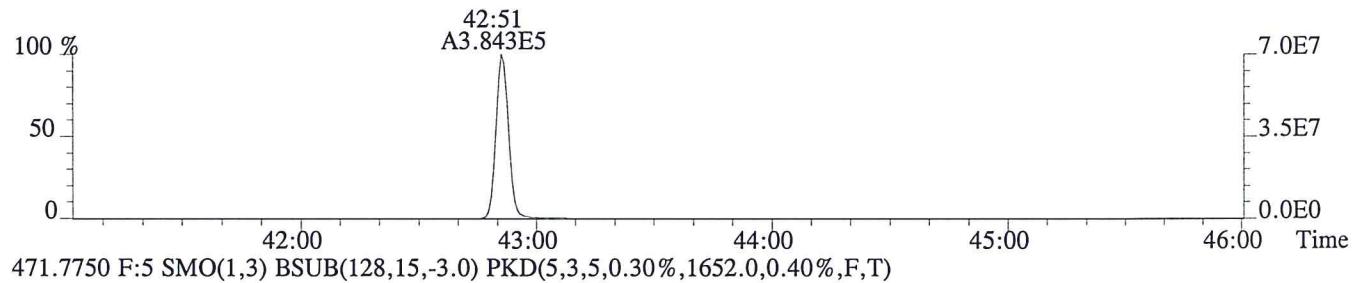
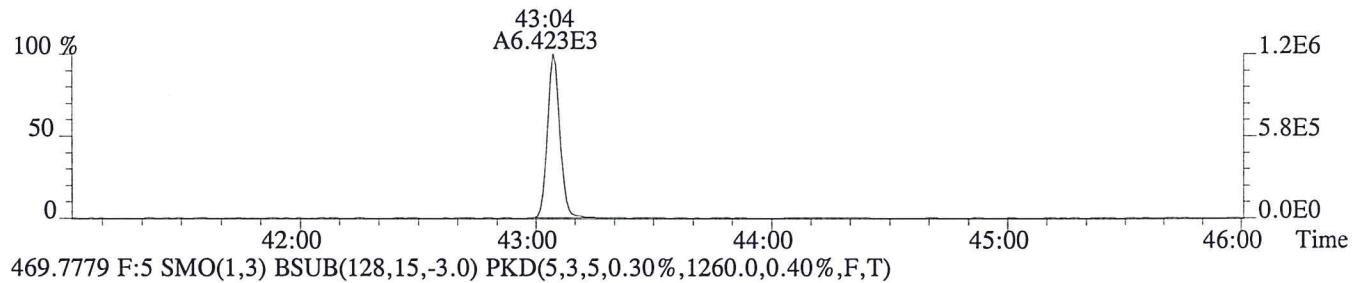
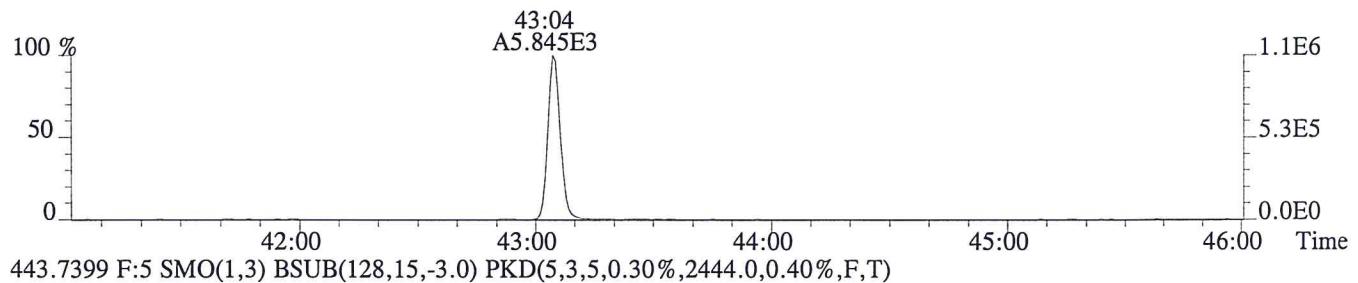
File:P600004 #1-213 Acq:19-AUG-2015 12:31:21 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:CS0.5  
 407.7818 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1844.0,0.50%,F,T)



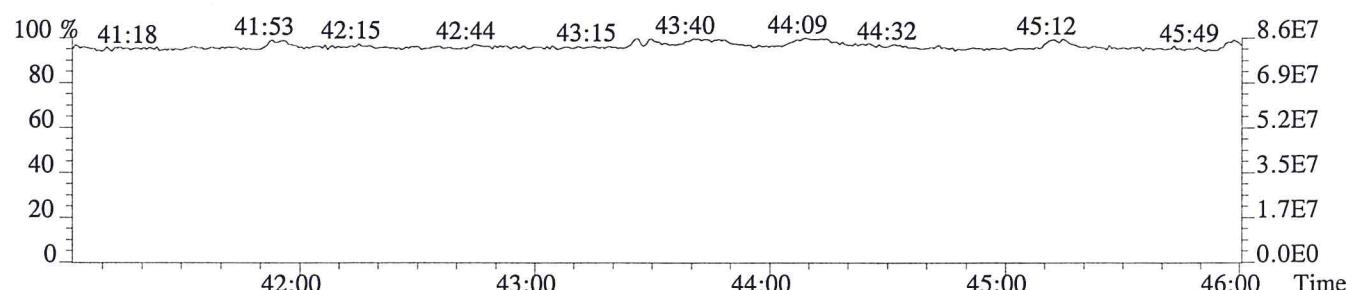
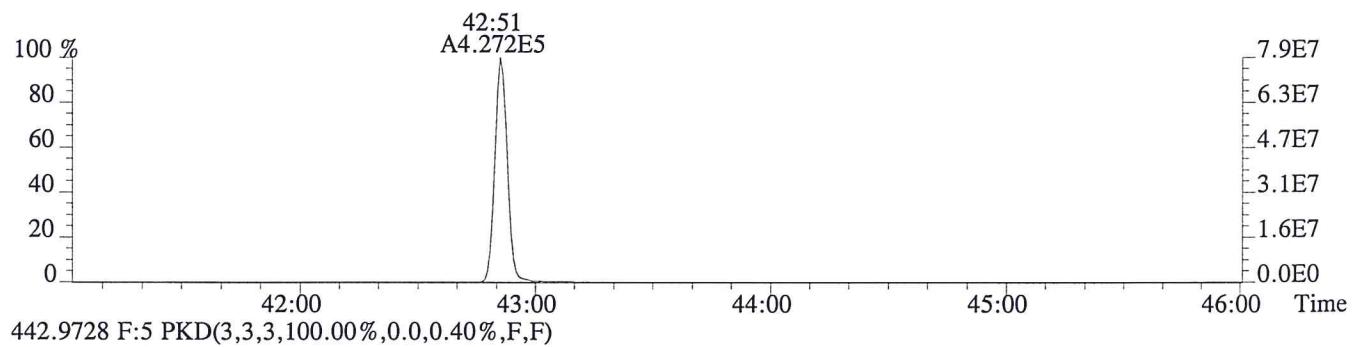
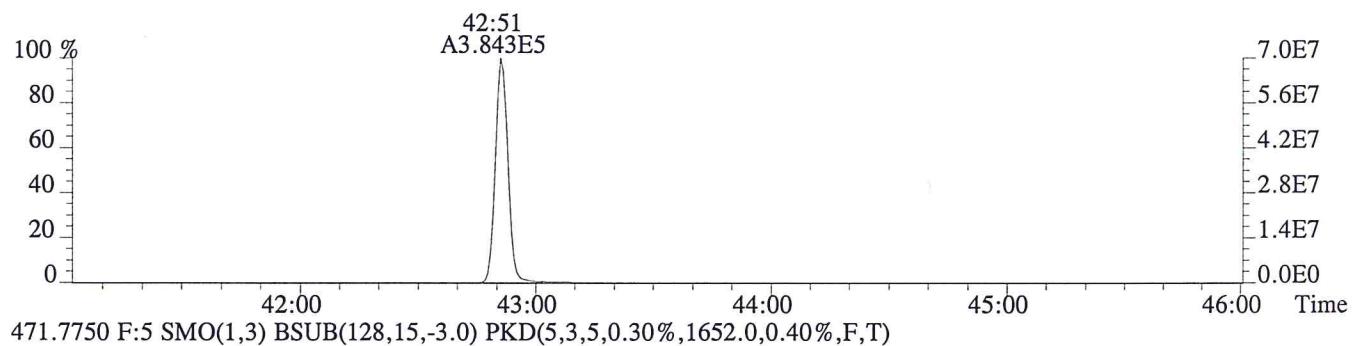
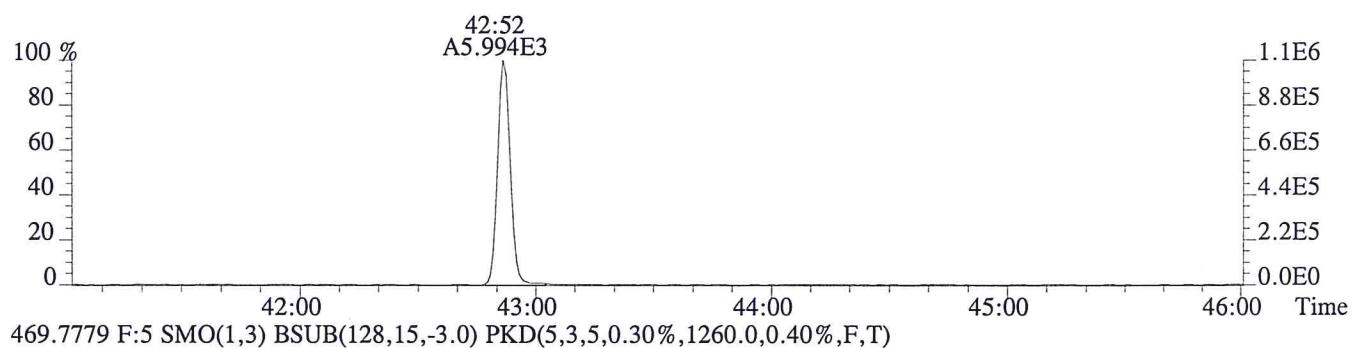
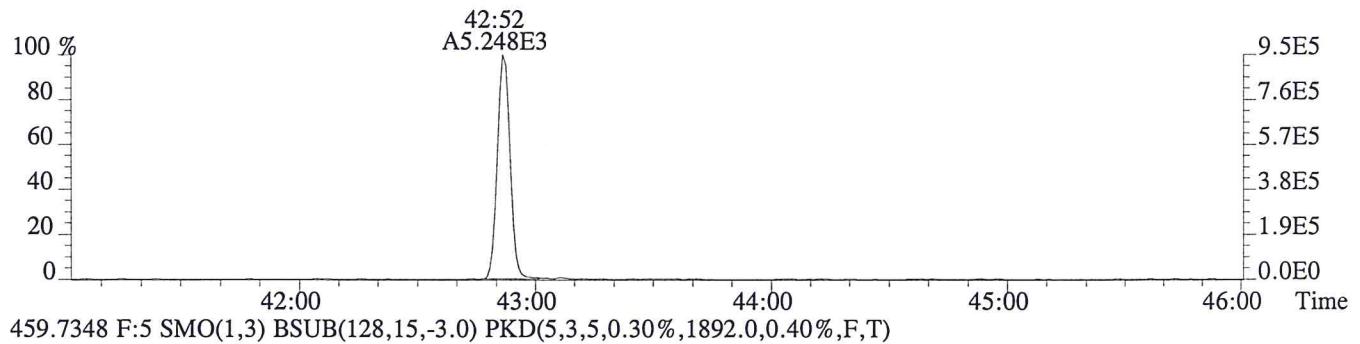
File:P600004 #1-213 Acq:19-AUG-2015 12:31:21 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:CS0.5  
 423.7766 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1884.0,0.40%,F,T)



File:P600004 #1-448 Acq:19-AUG-2015 12:31:21 Probe EI+ Magnet SIR VG BioTech Mass spect&  
 Sample#1 Exp:CS0.5  
 441.7428 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1476.0,0.40%,F,T)



File:P600004 #1-448 Acq:19-AUG-2015 12:31:21 Probe EI+ Magnet SIR VG BioTech Mass spect&  
 Sample#1 Exp:CS0.5  
 457.7377 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1080.0,0.40%,F,T)



ALS ENVIRONMENTAL  
Sample Response Summary

CLIENT ID.  
76555

Run #2      Filename P600005      Samp: 1      Inj: 1      Acquired: 19-AUG-15 13:20:24  
Processed: 19-AUG-15 16:14:16      Sample ID: CS1

Typ	Name	RT-1	Resp 1	Resp 2	Ratio	Meet	Mod?	RRF
1 Unk	2,3,7,8-TCDF	29:04	2.223e+03	2.898e+03	0.77	yes	no	0.941
2 Unk	1,2,3,7,8-PeCDF	33:03	1.719e+04	1.109e+04	1.55	yes	no	0.987
3 Unk	2,3,4,7,8-PeCDF	33:55	1.607e+04	1.012e+04	1.59	yes	no	0.934
4 Unk	1,2,3,4,7,8-HxCDF	36:30	1.414e+04	1.156e+04	1.22	yes	no	1.189
5 Unk	1,2,3,6,7,8-HxCDF	36:37	1.407e+04	1.145e+04	1.23	yes	no	1.126
6 Unk	2,3,4,6,7,8-HxCDF	37:06	1.406e+04	1.136e+04	1.24	yes	no	1.116
7 Unk	1,2,3,7,8,9-HxCDF	37:50	1.329e+04	1.063e+04	1.25	yes	no	1.158
8 Unk	1,2,3,4,6,7,8-HpCDF	39:04	1.212e+04	1.191e+04	1.02	yes	no	1.373
9 Unk	1,2,3,4,7,8,9-HpCDF	40:30	1.178e+04	1.163e+04	1.01	yes	no	1.287
10 Unk	OCDF	43:05	1.550e+04	1.716e+04	0.90	yes	no	1.257
11 Unk	2,3,7,8-TCDD	29:48	2.052e+03	2.618e+03	0.78	yes	no	1.010
12 Unk	1,2,3,7,8-PeCDD	34:12	1.256e+04	8.073e+03	1.56	yes	no	0.932
13 Unk	1,2,3,4,7,8-HxCDD	37:14	1.030e+04	8.055e+03	1.28	yes	no	1.026
14 Unk	1,2,3,6,7,8-HxCDD	37:19	9.553e+03	7.673e+03	1.24	yes	no	1.021
15 Unk	1,2,3,7,8,9-HxCDD	37:33	1.167e+04	8.883e+03	1.31	yes	no	1.133
16 Unk	1,2,3,4,6,7,8-HpCDD	40:01	9.232e+03	8.895e+03	1.04	yes	no	1.034
17 Unk	OCDD	42:52	1.351e+04	1.536e+04	0.88	yes	no	1.111
18 IS	13C-2,3,7,8-TCDF	29:03	4.804e+05	6.071e+05	0.79	yes	no	1.379
19 IS	13C-1,2,3,7,8-PeCDF	33:03	6.866e+05	4.355e+05	1.58	yes	no	1.456
20 IS	13C-2,3,4,7,8-PeCDF	33:55	6.829e+05	4.331e+05	1.58	yes	no	1.465
21 IS	13C-1,2,3,4,7,8-HxCDF	36:30	2.953e+05	5.664e+05	0.52	yes	no	1.075
22 IS	13C-1,2,3,6,7,8-HxCDF	36:36	3.081e+05	5.838e+05	0.53	yes	no	1.158
23 IS	13C-2,3,4,6,7,8-HxCDF	37:05	3.005e+05	5.763e+05	0.52	yes	no	1.133
24 IS	13C-1,2,3,7,8,9-HxCDF	37:50	2.807e+05	5.421e+05	0.52	yes	no	1.024
25 IS	13C-1,2,3,4,6,7,8-HpCDF	39:04	2.120e+05	4.726e+05	0.45	yes	no	0.880
26 IS	13C-1,2,3,4,7,8,9-HpCDF	40:29	2.215e+05	4.965e+05	0.45	yes	no	0.914
27 IS	13C-2,3,7,8-TCDD	29:48	4.011e+05	5.083e+05	0.79	yes	no	1.193
28 IS	13C-1,2,3,7,8-PeCDD	34:11	5.317e+05	3.387e+05	1.57	yes	no	1.094
29 IS	13C-1,2,3,4,7,8-HxCDD	37:13	3.949e+05	3.122e+05	1.27	yes	no	0.906
30 IS	13C-1,2,3,6,7,8-HxCDD	37:18	3.708e+05	2.945e+05	1.26	yes	no	0.860
31 IS	13C-1,2,3,4,6,7,8-HpCDD	40:00	3.517e+05	3.330e+05	1.06	yes	no	0.892
32 IS	13C-OCDD	42:51	4.770e+05	5.317e+05	0.90	yes	no	0.642
33 RS/RT	13C-1,2,3,4-TCDD	29:15	3.478e+05	4.386e+05	0.79	yes	no	-
34 RS/RT	13C-1,2,3,7,8,9-HxCDD	37:32	4.451e+05	3.534e+05	1.26	yes	no	-
35 C/Up	37Cl-2,3,7,8-TCDD	29:48	4.909e+03				no	1.263

---

ALS ENVIRONMENTAL  
10450 Stancliff Rd, Suite 115  
Houston, TX 77099  
Office (713) 266-1599. Fax (713) 266-0130

[www.alsglobal.com](http://www.alsglobal.com)

ALS ENVIRONMENTAL  
Signal/Noise Height Ratio Summary

CLIENT ID.  
76555

Run #2   Filename P600005              Samp: 1    Inj: 1              Acquired: 19-AUG-15 13:20:24  
Processed: 19-AUG-15 16:14:16              LAB. ID: CS1

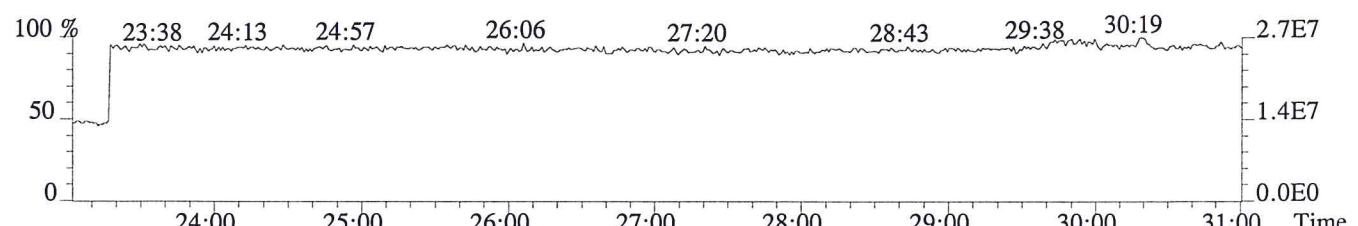
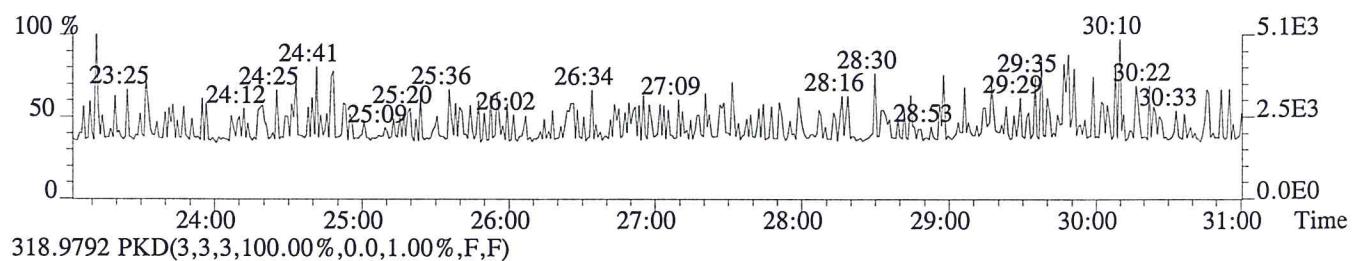
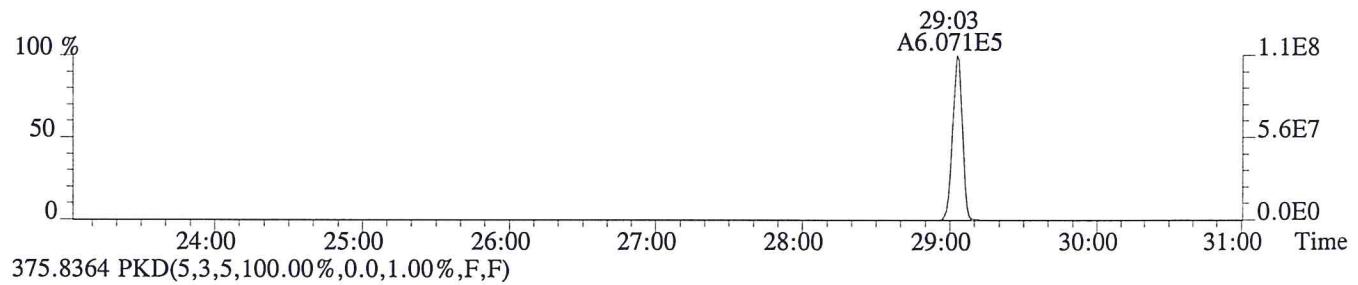
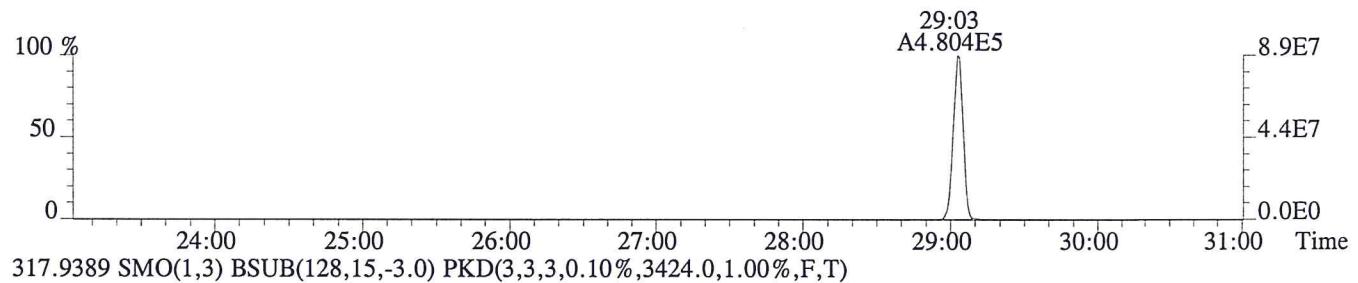
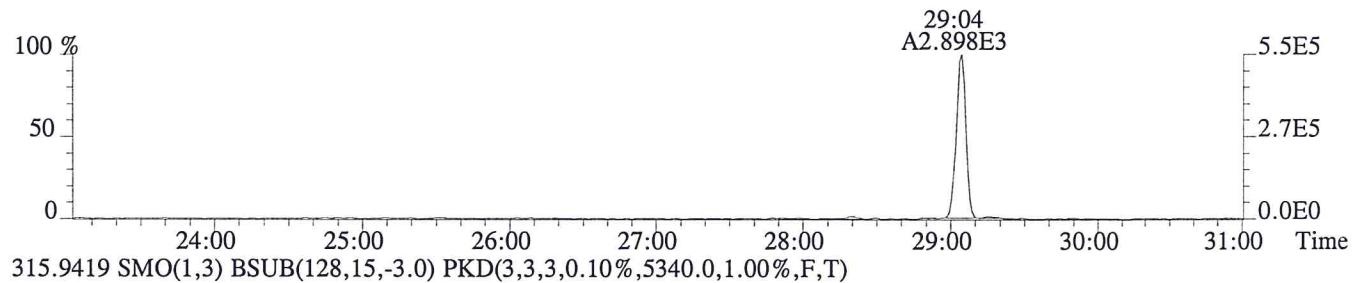
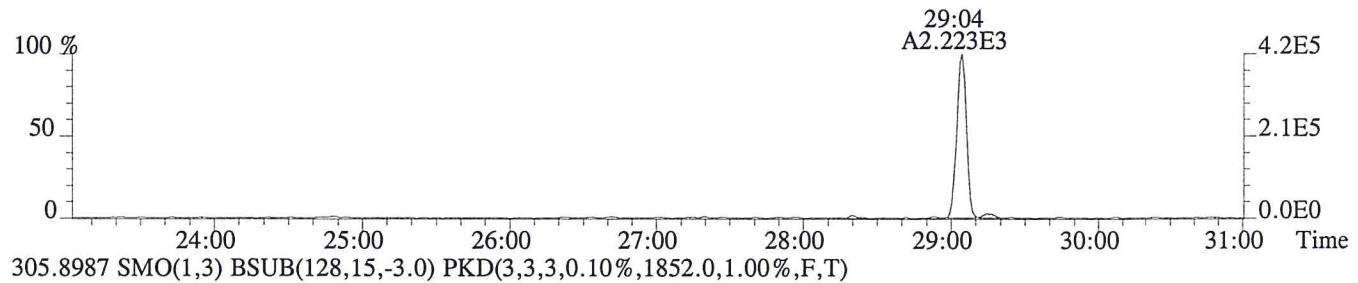
	Name	Signal 1	Noise 1	S/N Rat.1	Signal 2	Noise 2	S/N Rat.2
--	------	----------	---------	-----------	----------	---------	-----------

1	2,3,7,8-TCDF	4.14e+05	2.02e+03	2.1e+02	5.45e+05	1.85e+03	2.9e+02
2	1,2,3,7,8-PeCDF	3.37e+06	1.72e+03	2.0e+03	2.17e+06	4.40e+03	4.9e+02
3	2,3,4,7,8-PeCDF	3.22e+06	1.72e+03	1.9e+03	2.02e+06	4.40e+03	4.6e+02
4	1,2,3,4,7,8-HxCDF	2.96e+06	1.39e+03	2.1e+03	2.43e+06	8.44e+02	2.9e+03
5	1,2,3,6,7,8-HxCDF	3.05e+06	1.39e+03	2.2e+03	2.47e+06	8.44e+02	2.9e+03
6	2,3,4,6,7,8-HxCDF	3.06e+06	1.39e+03	2.2e+03	2.48e+06	8.44e+02	2.9e+03
7	1,2,3,7,8,9-HxCDF	2.86e+06	1.39e+03	2.1e+03	2.25e+06	8.44e+02	2.7e+03
8	1,2,3,4,6,7,8-HpCDF	2.62e+06	1.51e+03	1.7e+03	2.57e+06	2.16e+03	1.2e+03
9	1,2,3,4,7,8,9-HpCDF	2.40e+06	1.51e+03	1.6e+03	2.37e+06	2.16e+03	1.1e+03
10	OCDF	2.66e+06	1.55e+03	1.7e+03	3.06e+06	2.28e+03	1.3e+03
11	2,3,7,8-TCDD	4.09e+05	2.26e+03	1.8e+02	5.20e+05	2.18e+03	2.4e+02
12	1,2,3,7,8-PeCDD	2.53e+06	2.62e+03	9.7e+02	1.64e+06	1.84e+03	8.9e+02
13	1,2,3,4,7,8-HxCDD	2.34e+06	1.32e+03	1.8e+03	1.82e+06	2.42e+03	7.5e+02
14	1,2,3,6,7,8-HxCDD	2.07e+06	1.32e+03	1.6e+03	1.69e+06	2.42e+03	7.0e+02
15	1,2,3,7,8,9-HxCDD	2.48e+06	1.32e+03	1.9e+03	1.92e+06	2.42e+03	7.9e+02
16	1,2,3,4,6,7,8-HpCDD	1.93e+06	1.49e+03	1.3e+03	1.82e+06	1.76e+03	1.0e+03
17	OCDD	2.46e+06	1.24e+03	2.0e+03	2.82e+06	1.88e+03	1.5e+03
18	13C-2,3,7,8-TCDF	8.89e+07	5.34e+03	1.7e+04	1.13e+08	3.42e+03	3.3e+04
19	13C-1,2,3,7,8-PeCDF	1.29e+08	1.80e+03	7.2e+04	8.15e+07	1.70e+03	4.8e+04
20	13C-2,3,4,7,8-PeCDF	1.35e+08	1.80e+03	7.5e+04	8.53e+07	1.70e+03	5.0e+04
21	13C-1,2,3,4,7,8-HxCDF	6.25e+07	2.66e+03	2.4e+04	1.21e+08	3.55e+03	3.4e+04
22	13C-1,2,3,6,7,8-HxCDF	6.60e+07	2.66e+03	2.5e+04	1.26e+08	3.55e+03	3.5e+04
23	13C-2,3,4,6,7,8-HxCDF	6.57e+07	2.66e+03	2.5e+04	1.27e+08	3.55e+03	3.6e+04
24	13C-1,2,3,7,8,9-HxCDF	6.03e+07	2.66e+03	2.3e+04	1.16e+08	3.55e+03	3.3e+04
25	13C-1,2,3,4,6,7,8-HpCDF	4.54e+07	9.87e+03	4.6e+03	1.01e+08	1.07e+04	9.5e+03
26	13C-1,2,3,4,7,8,9-HpCDF	4.45e+07	9.87e+03	4.5e+03	1.00e+08	1.07e+04	9.4e+03
27	13C-2,3,7,8-TCDD	7.93e+07	9.97e+03	8.0e+03	9.97e+07	6.10e+03	1.6e+04
28	13C-1,2,3,7,8-PeCDD	1.07e+08	2.26e+03	4.7e+04	6.82e+07	1.62e+03	4.2e+04
29	13C-1,2,3,4,7,8-HxCDD	8.85e+07	6.34e+03	1.4e+04	6.96e+07	3.31e+03	2.1e+04
30	13C-1,2,3,6,7,8-HxCDD	8.03e+07	6.34e+03	1.3e+04	6.45e+07	3.31e+03	2.0e+04
31	13C-1,2,3,4,6,7,8-HpCDD	7.26e+07	1.95e+03	3.7e+04	6.82e+07	1.87e+03	3.6e+04
32	13C-OCDD	8.62e+07	2.08e+03	4.1e+04	9.64e+07	2.02e+03	4.8e+04
33	13C-1,2,3,4-TCDD	6.71e+07	9.97e+03	6.7e+03	8.46e+07	6.10e+03	1.4e+04
34	13C-1,2,3,7,8,9-HxCDD	9.54e+07	6.34e+03	1.5e+04	7.59e+07	3.31e+03	2.3e+04
35	37Cl-2,3,7,8-TCDD	9.89e+05	3.67e+03	2.7e+02			

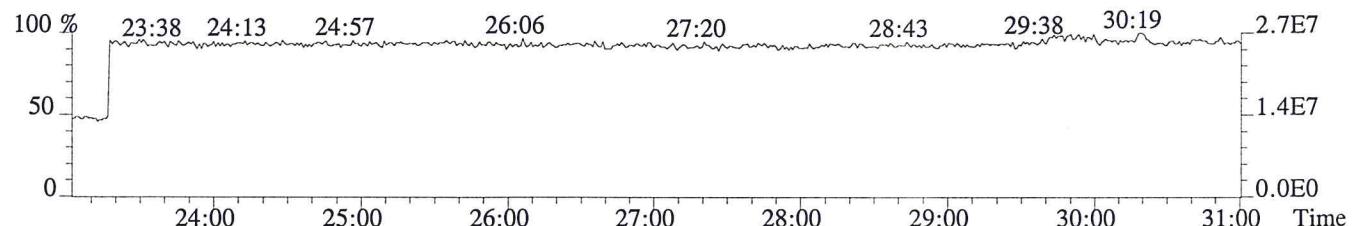
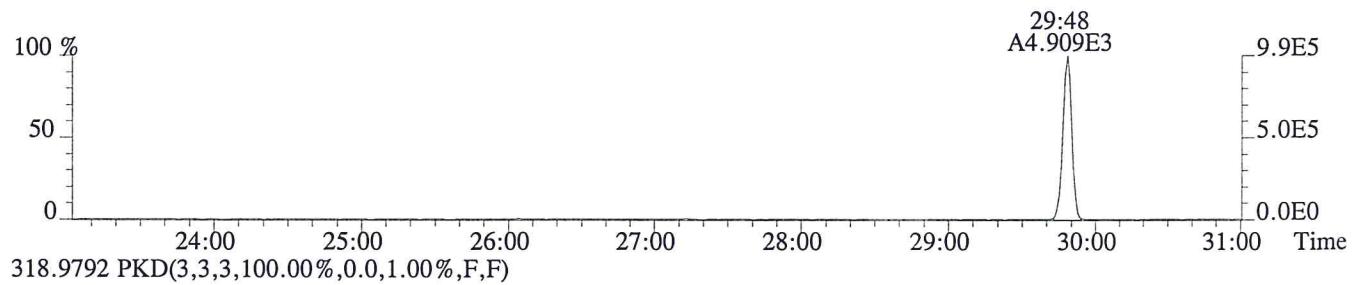
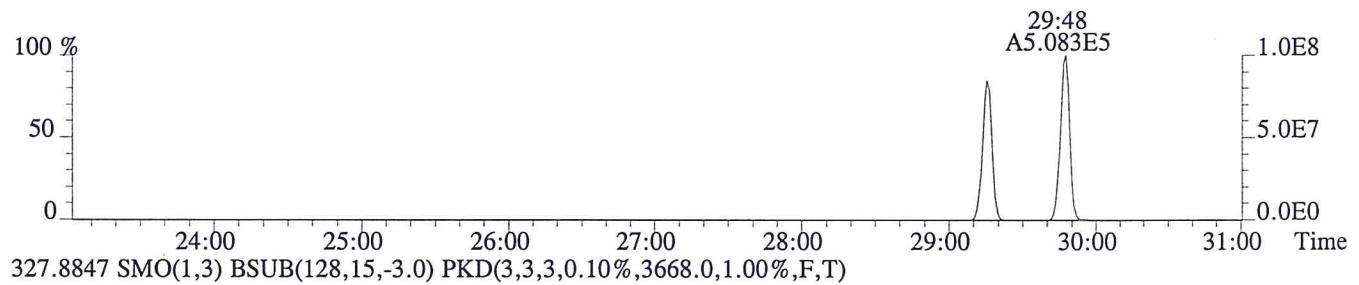
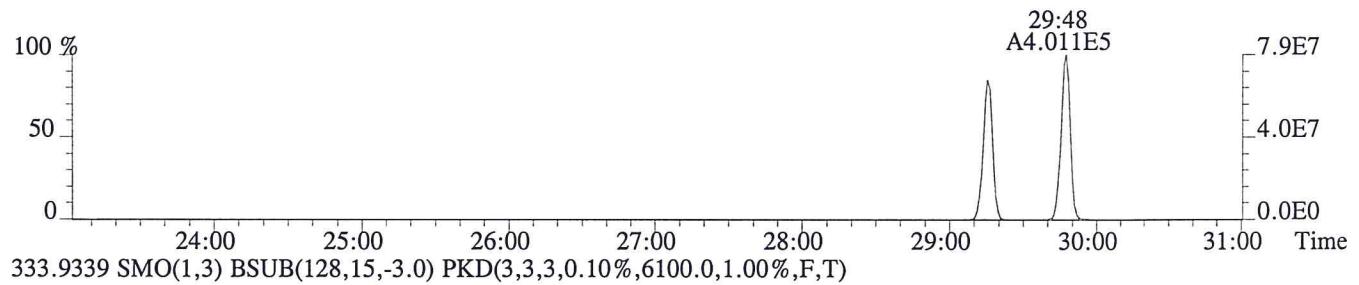
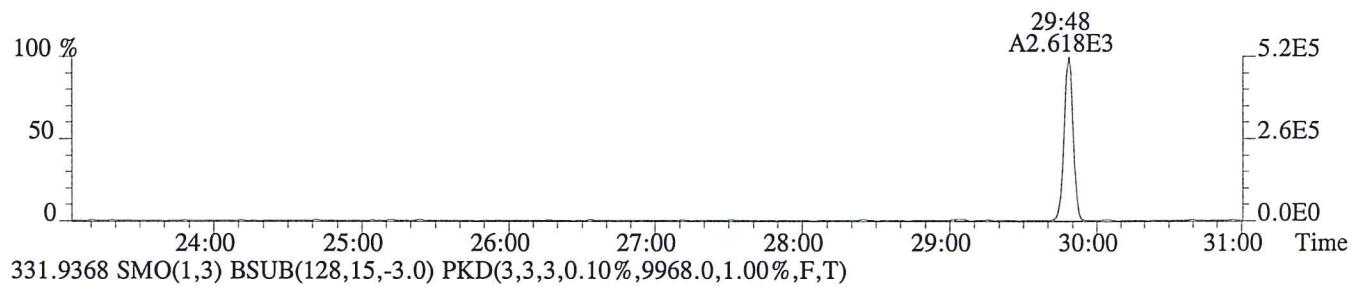
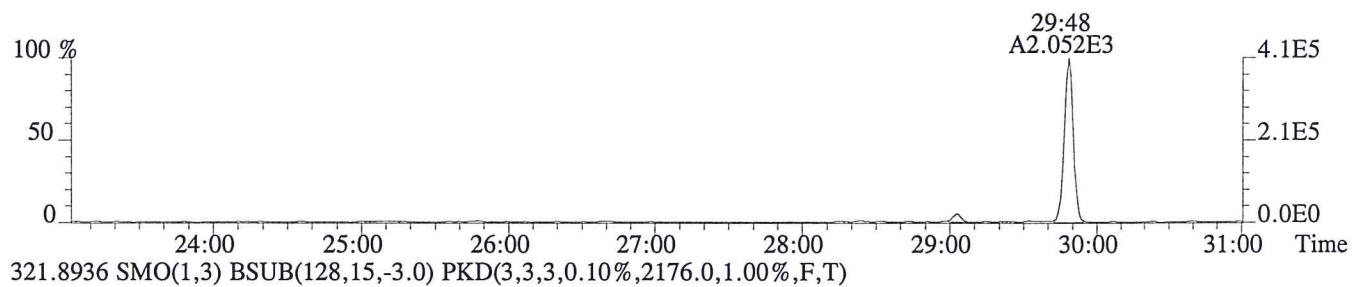
---

ALS ENVIRONMENTAL  
10450 Stancliff Rd., Suite 115  
Houston, TX 77099  
Office: (713) 266-1599. Fax: (713) 266-0130

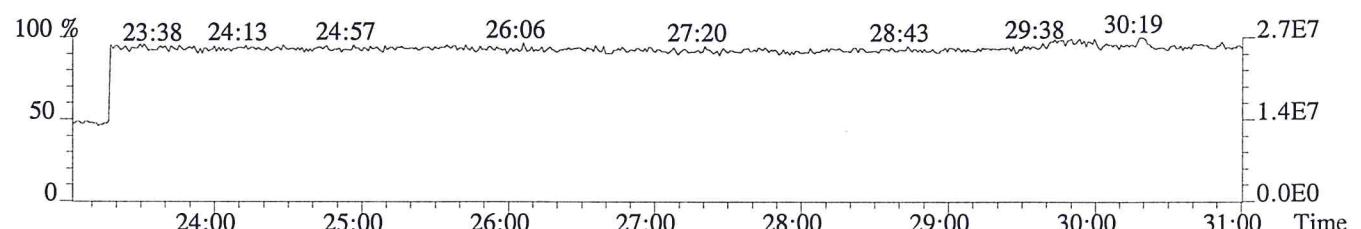
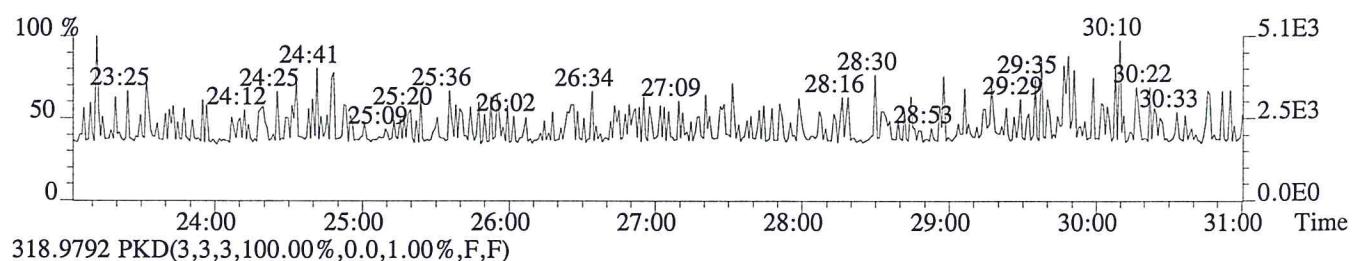
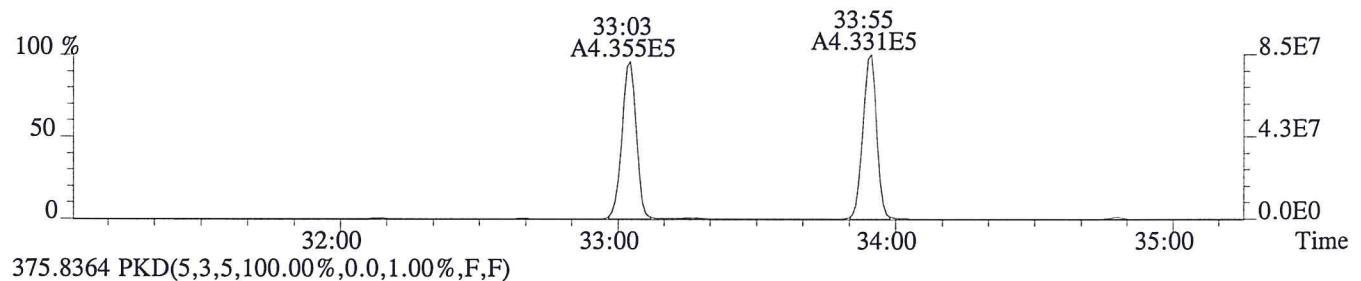
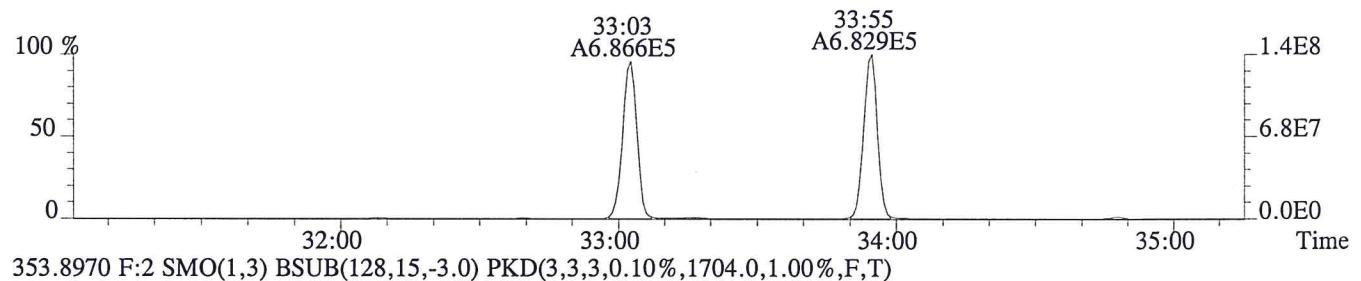
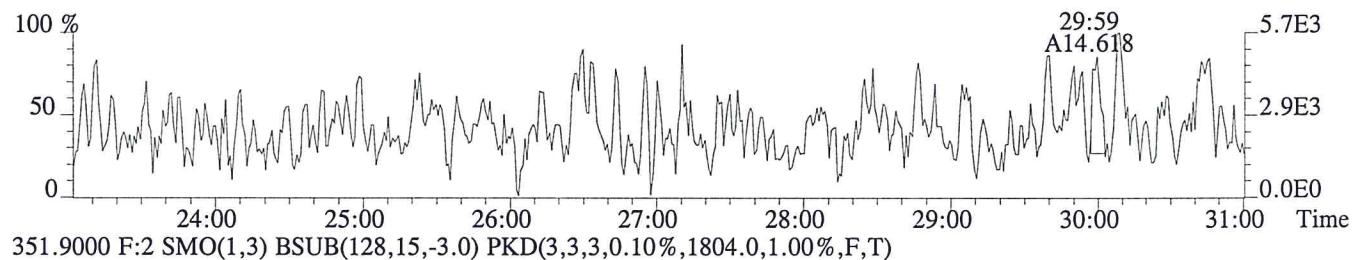
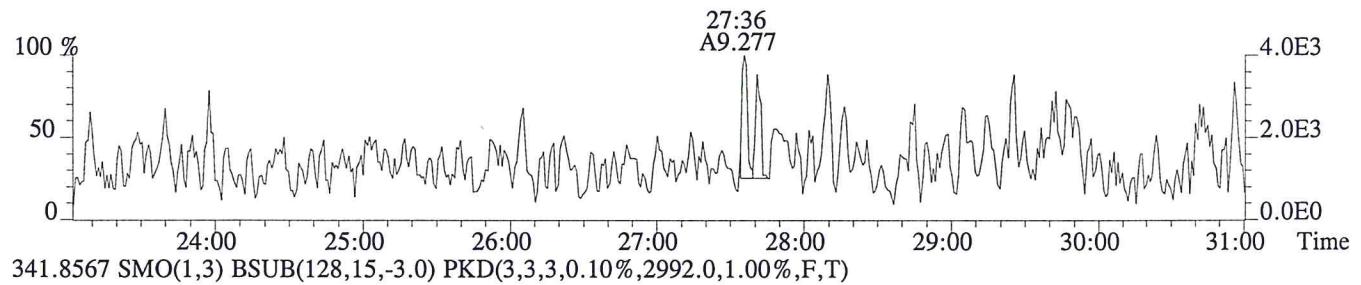
File:P600005 #1-566 Acq:19-AUG-2015 13:20:24 Probe EI+ Magnet SIR VG BioTech Mass spect<br/>Sample#1 Exp:CS1  
303.9016 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,2020.0,1.00%,F,T)



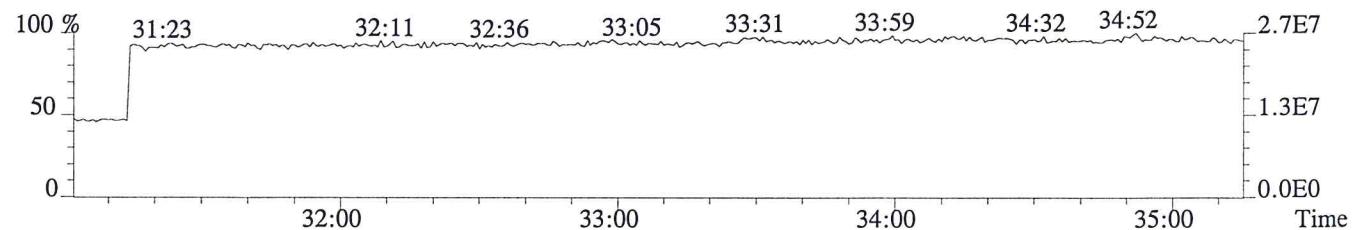
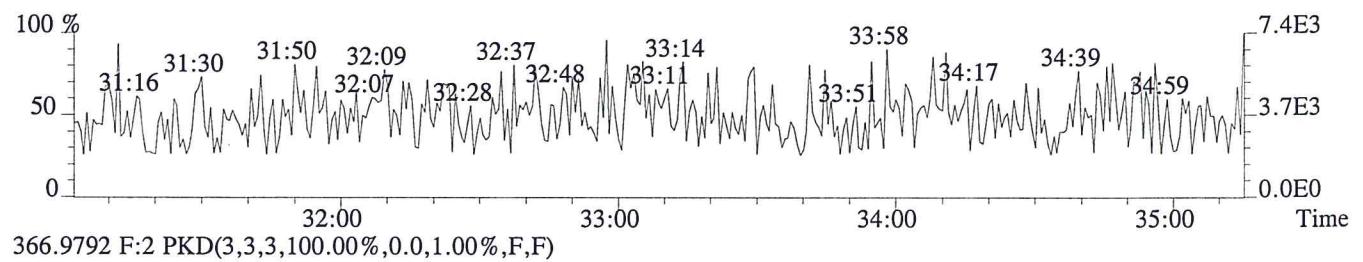
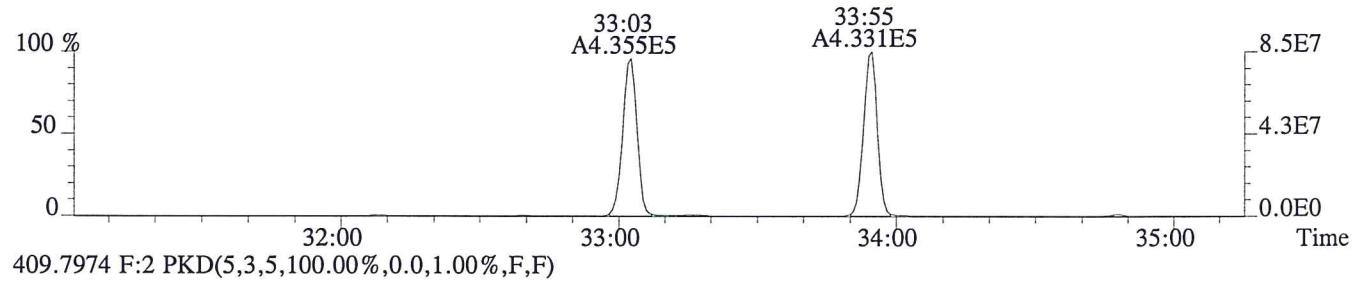
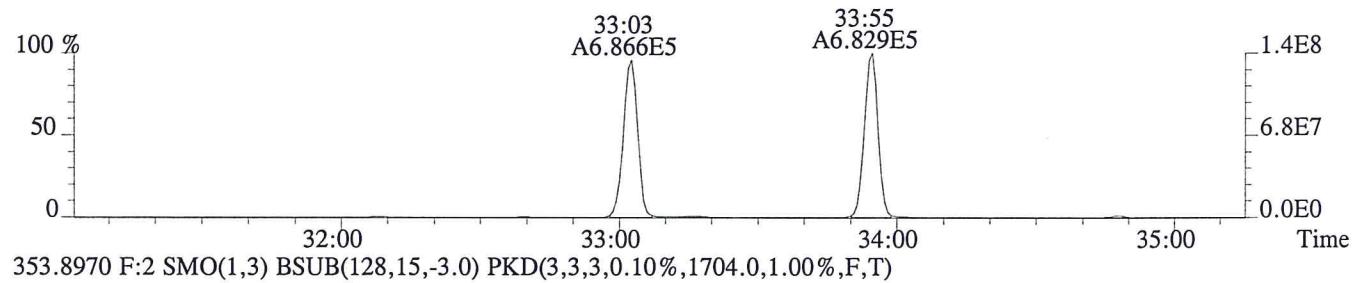
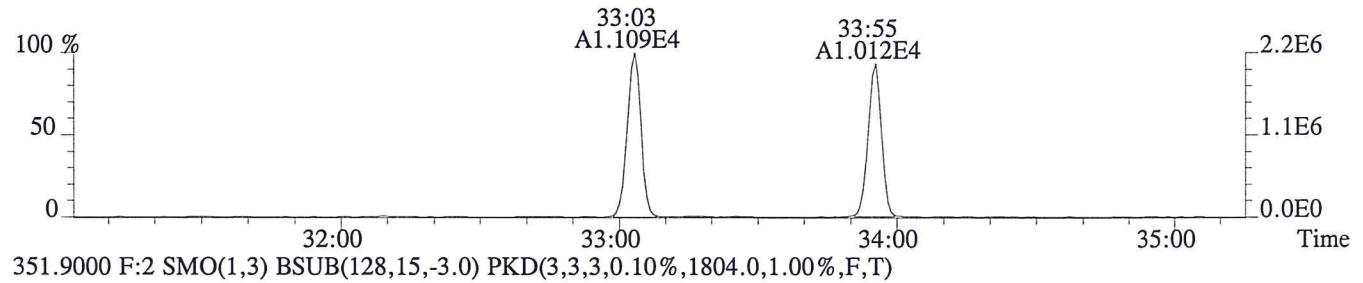
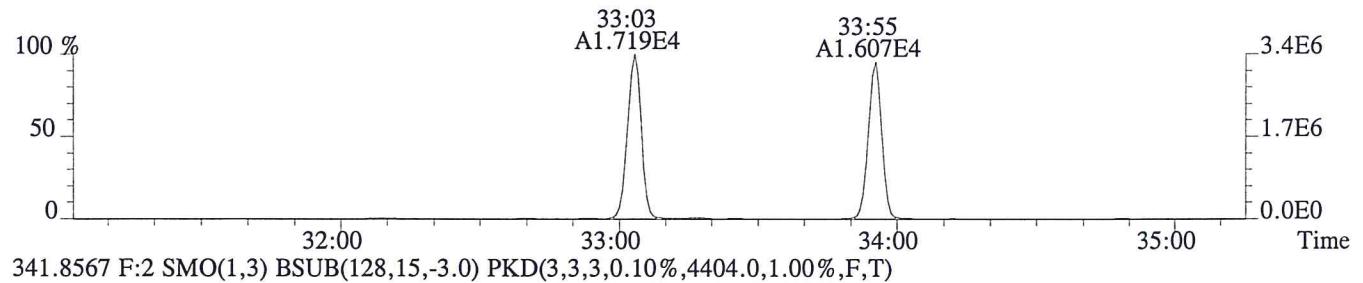
File:P600005 #1-566 Acq:19-AUG-2015 13:20:24 Probe EI+ Magnet SIR VG BioTech Mass spect&  
 Sample#1 Exp:CS1  
 319.8965 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,2260.0,1.00%,F,T)



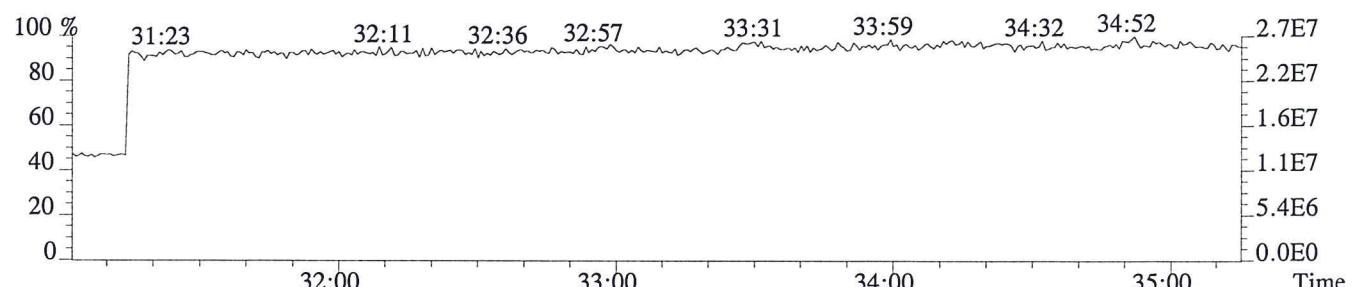
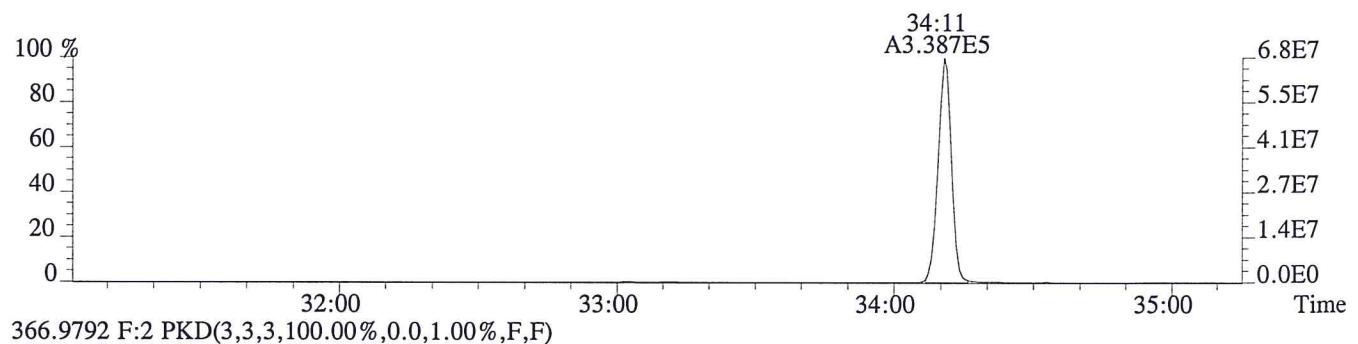
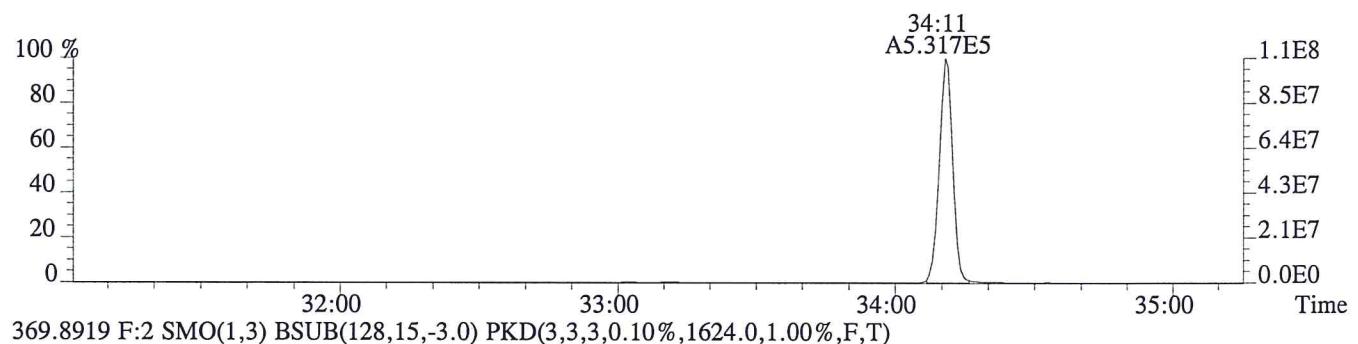
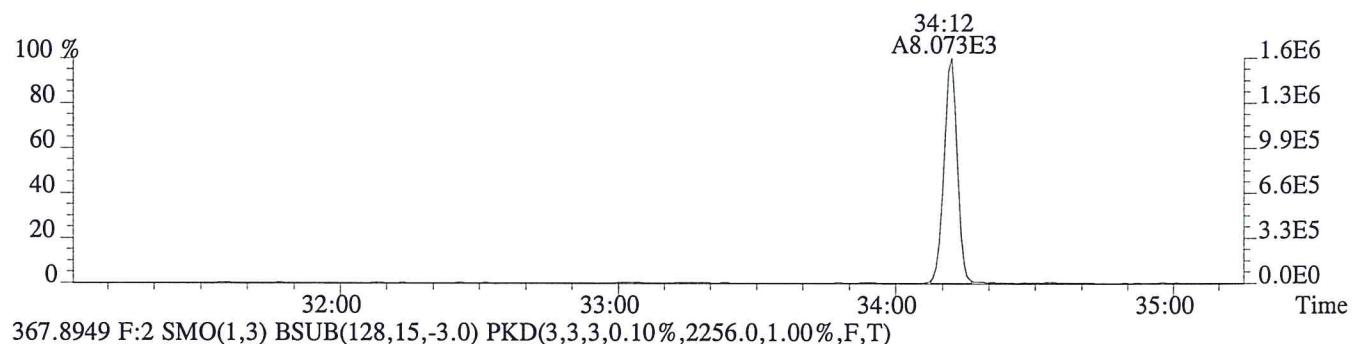
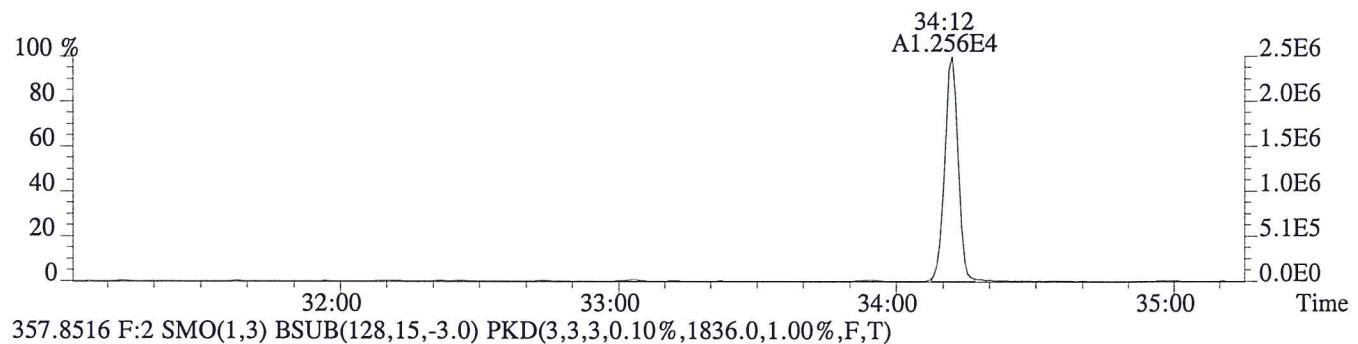
File:P600005 #1-566 Acq:19-AUG-2015 13:20:24 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:CS1  
 339.8597 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1716.0,1.00%,F,T)



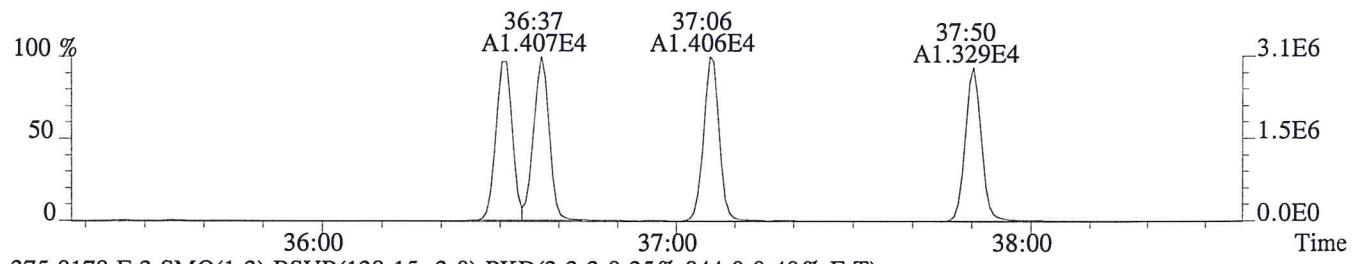
File:P600005 #1-380 Acq:19-AUG-2015 13:20:24 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:CS1  
 339.8597 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1724.0,1.00%,F,T)



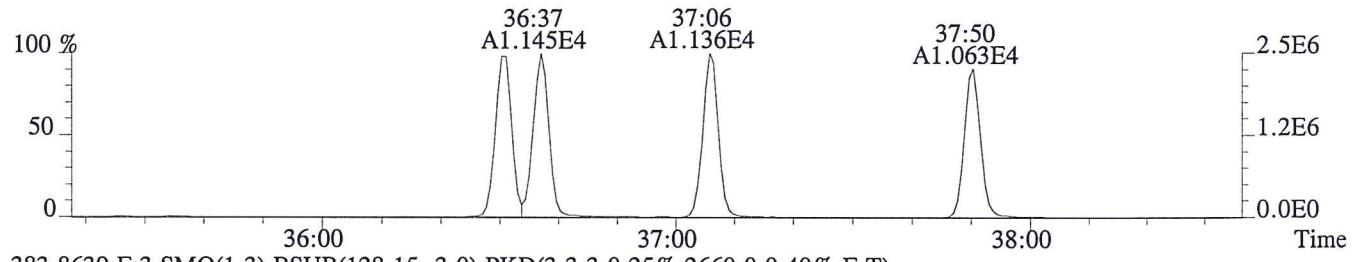
File:P600005 #1-380 Acq:19-AUG-2015 13:20:24 Probe EI+ Magnet SIR VG BioTech Mass spectf  
Sample#1 Exp:CS1  
355.8546 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,2616.0,1.00%,F,T)



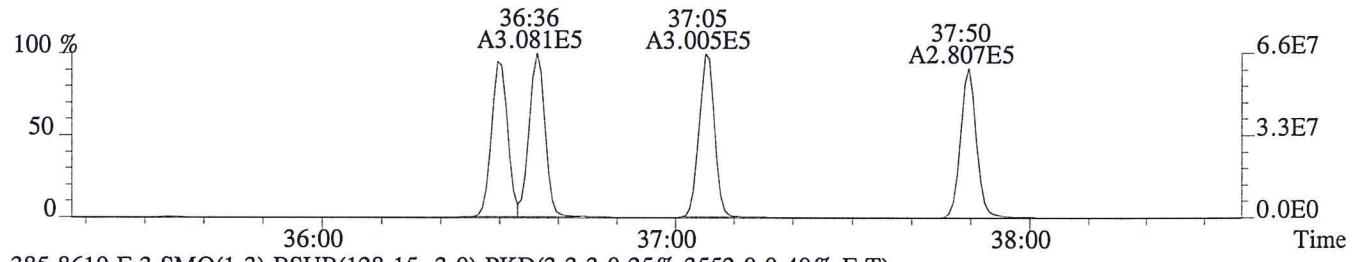
File:P600005 #1-299 Acq:19-AUG-2015 13:20:24 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:CS1  
 373.8208 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1392.0,0.40%,F,T)



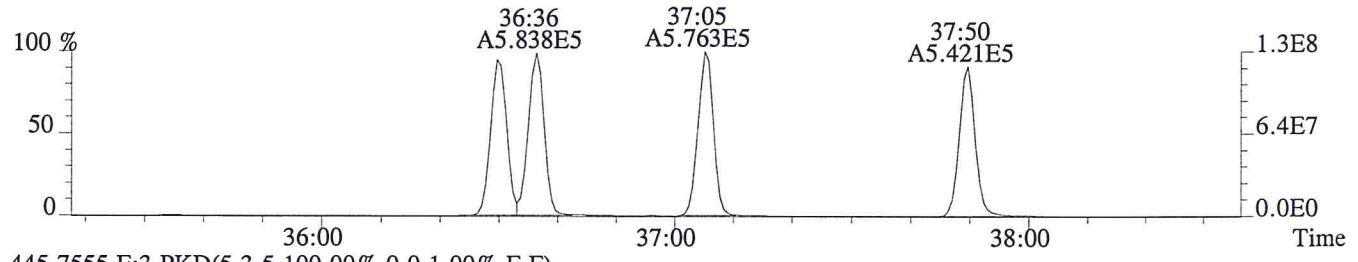
375.8178 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,844.0,0.40%,F,T)



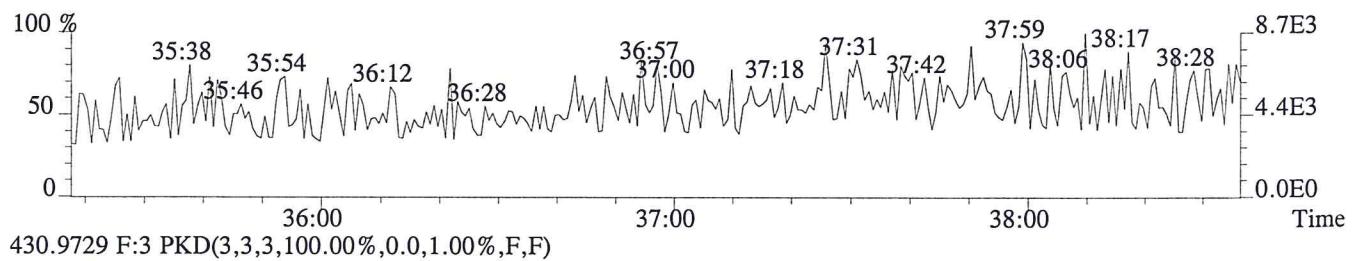
383.8639 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,2660.0,0.40%,F,T)



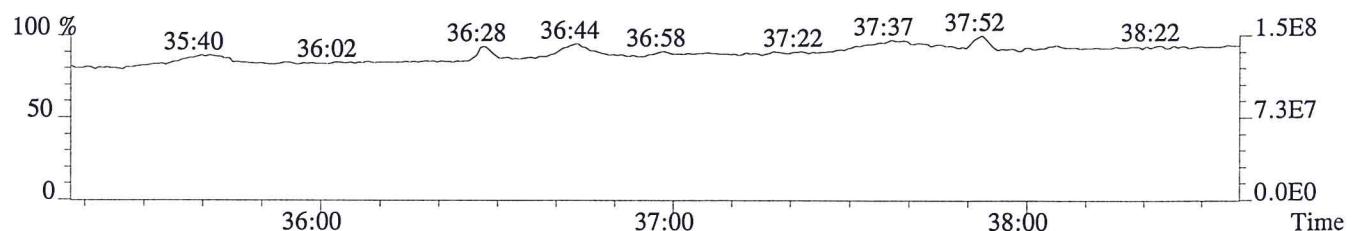
385.8610 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,3552.0,0.40%,F,T)



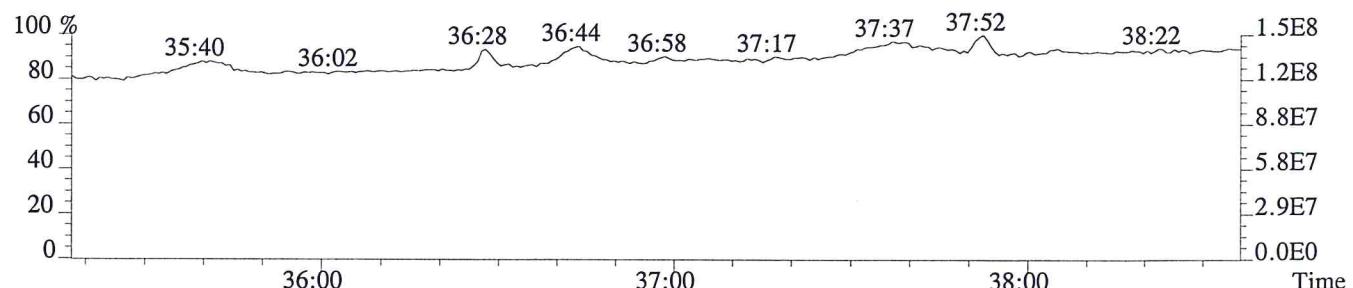
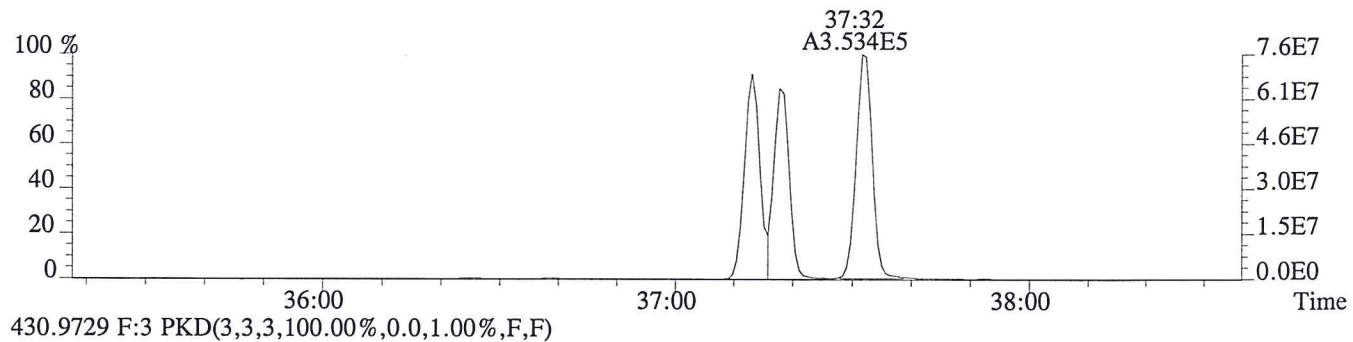
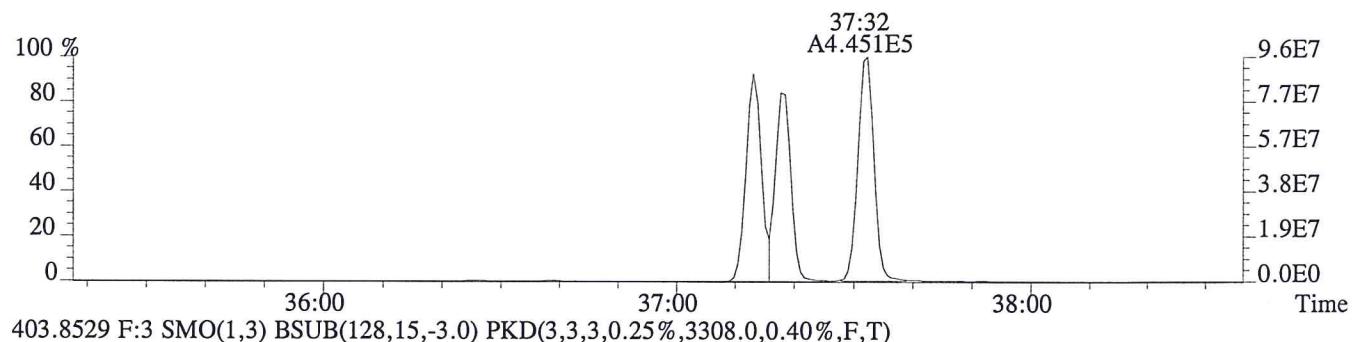
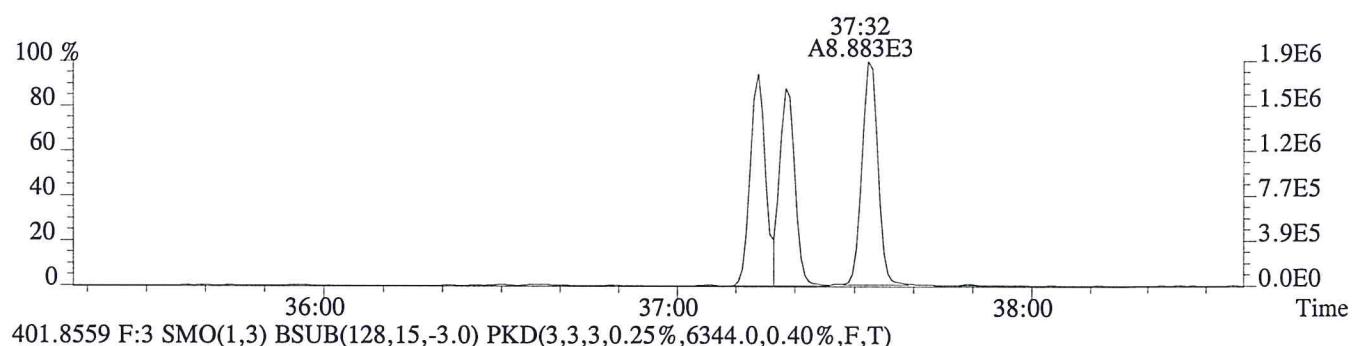
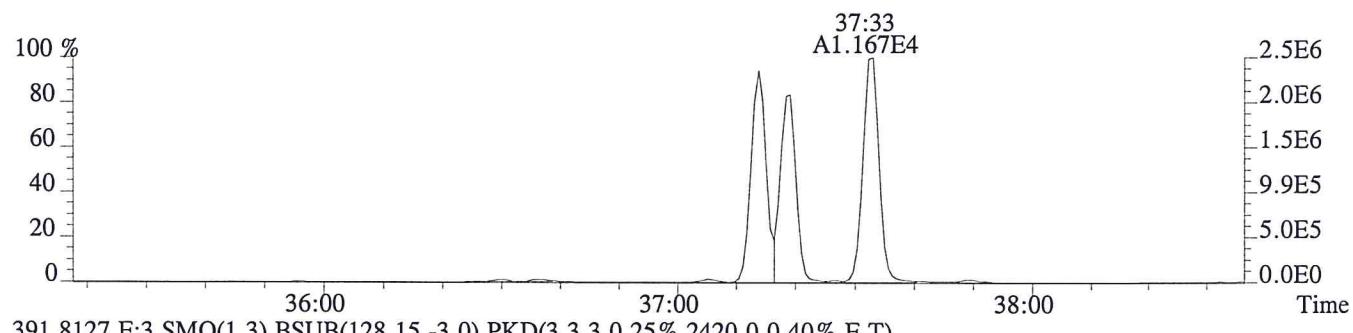
445.7555 F:3 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



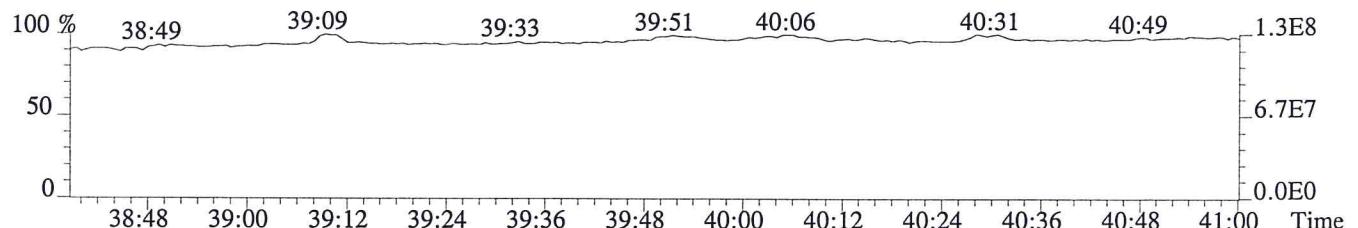
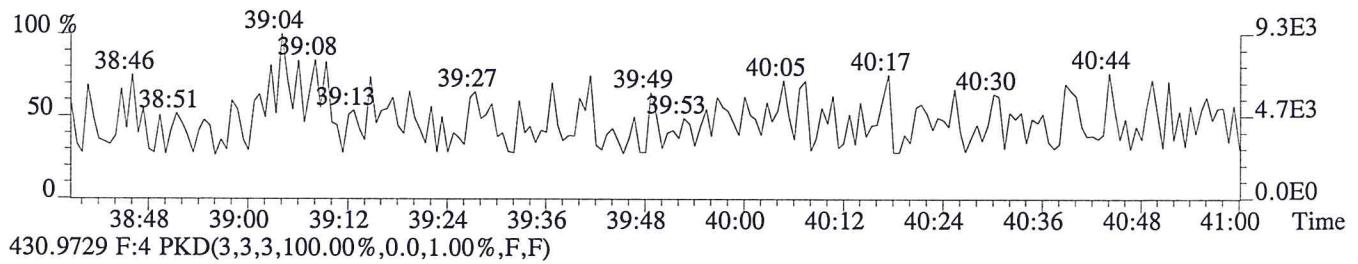
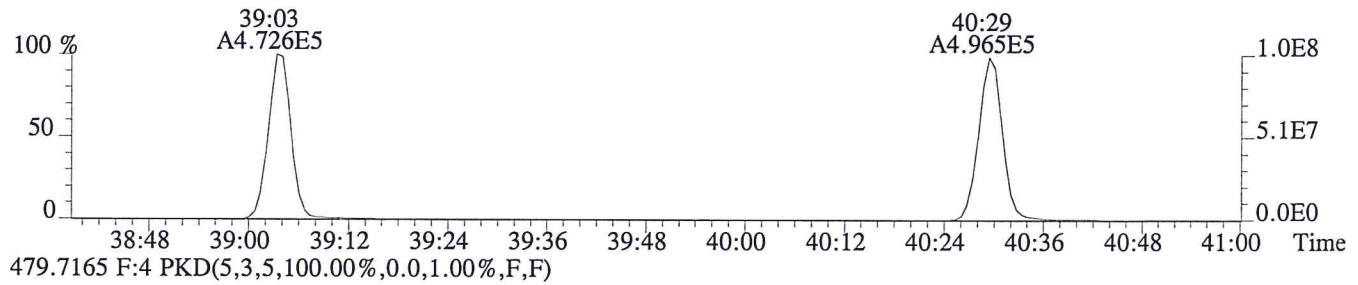
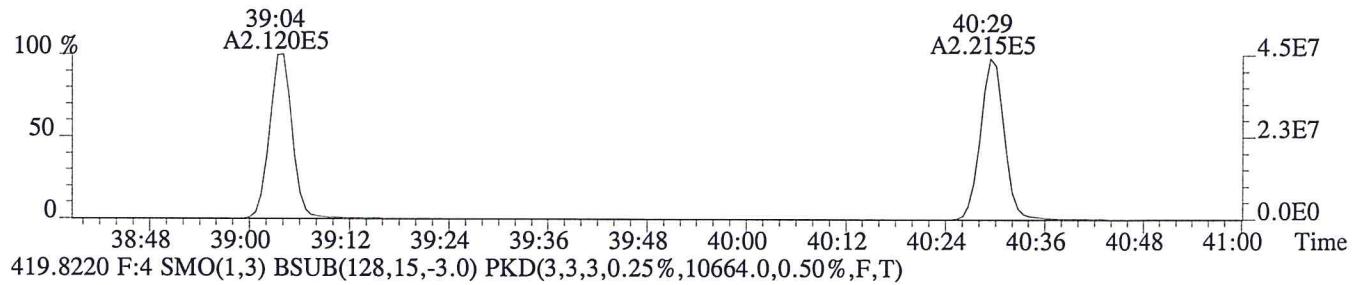
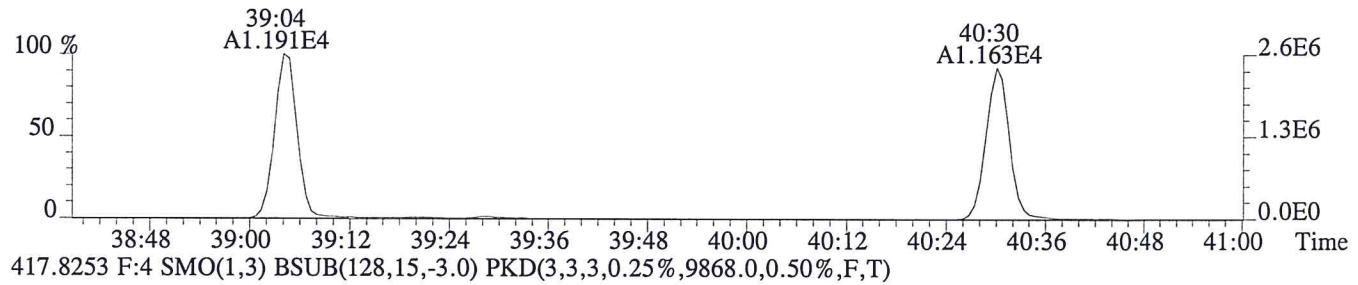
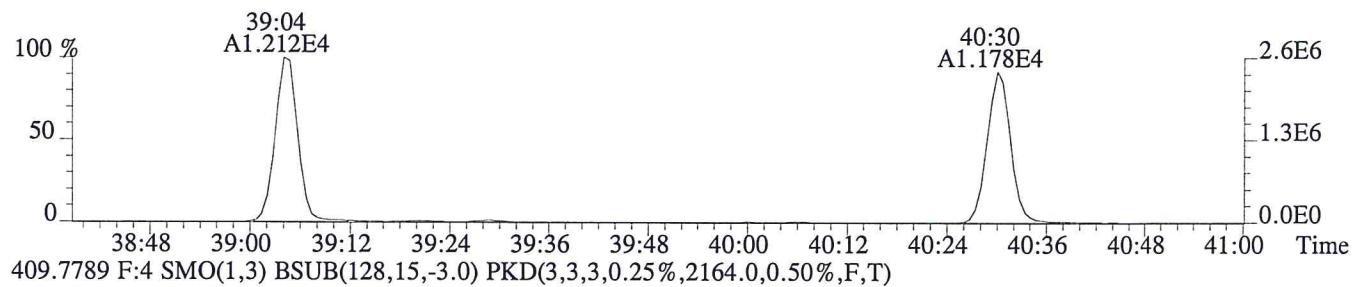
430.9729 F:3 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



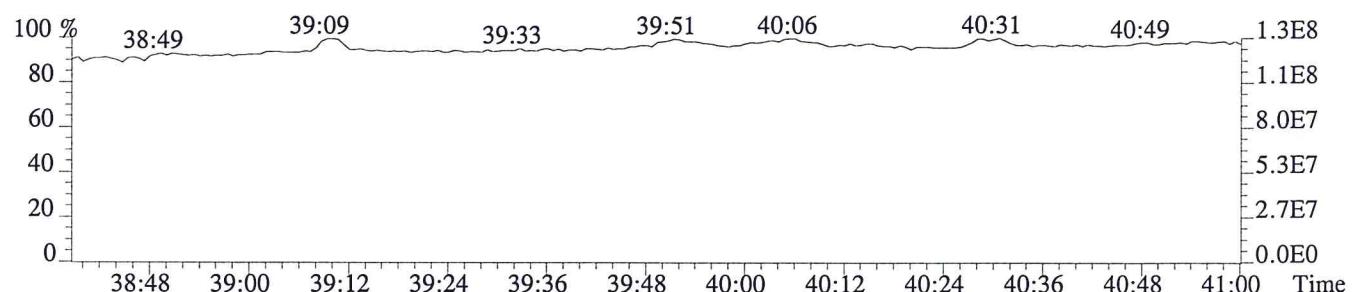
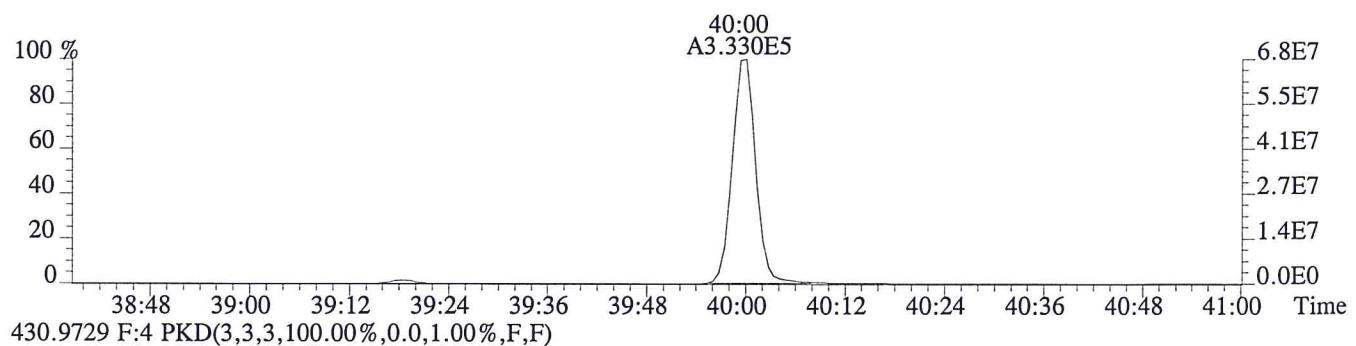
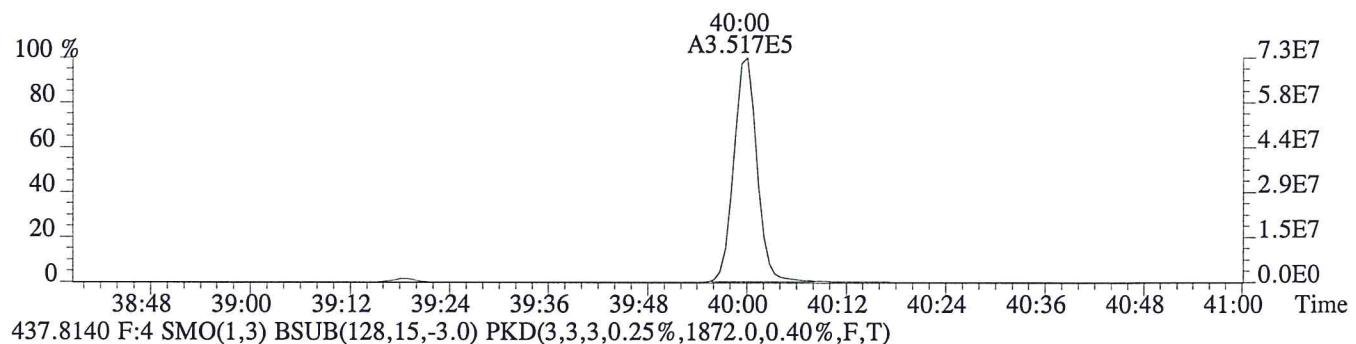
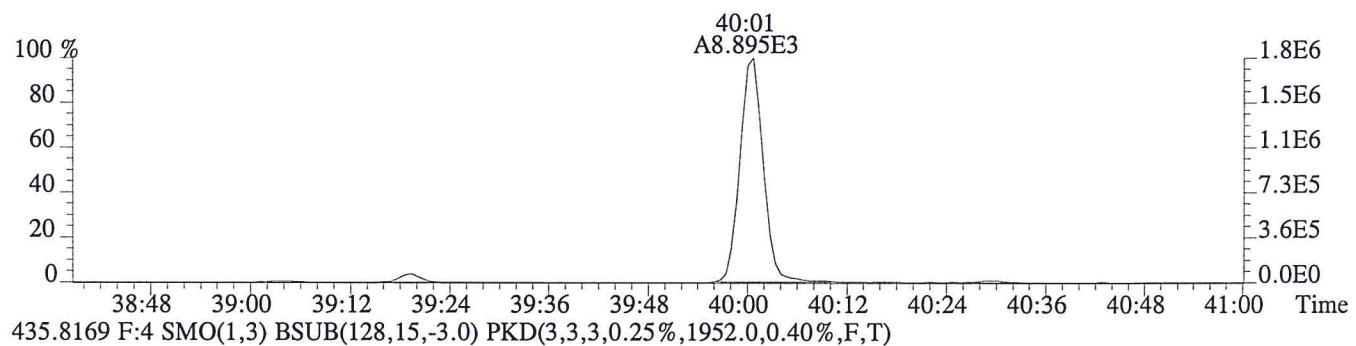
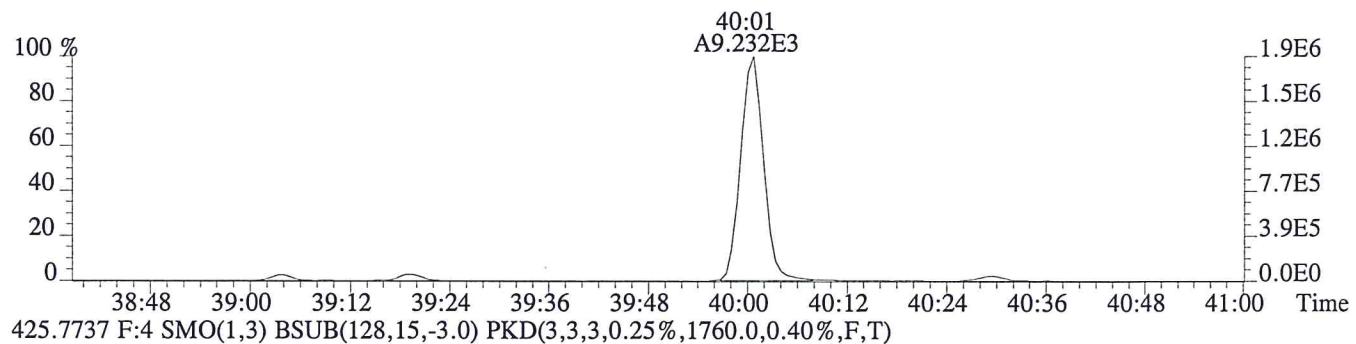
File:P600005 #1-299 Acq:19-AUG-2015 13:20:24 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:CS1  
 389.8157 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1320.0,0.40%,F,T)



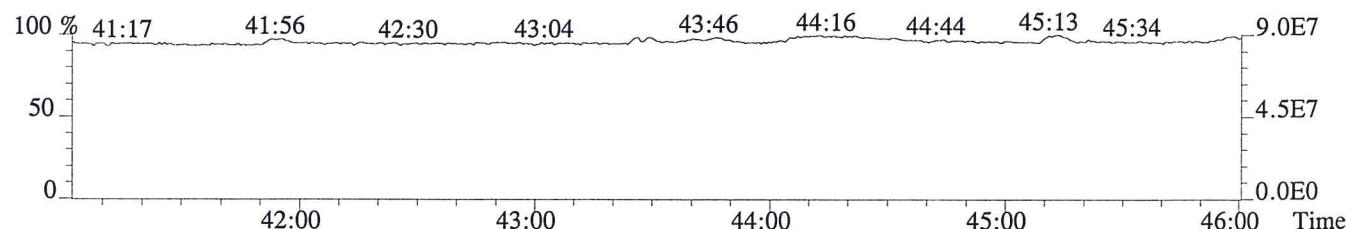
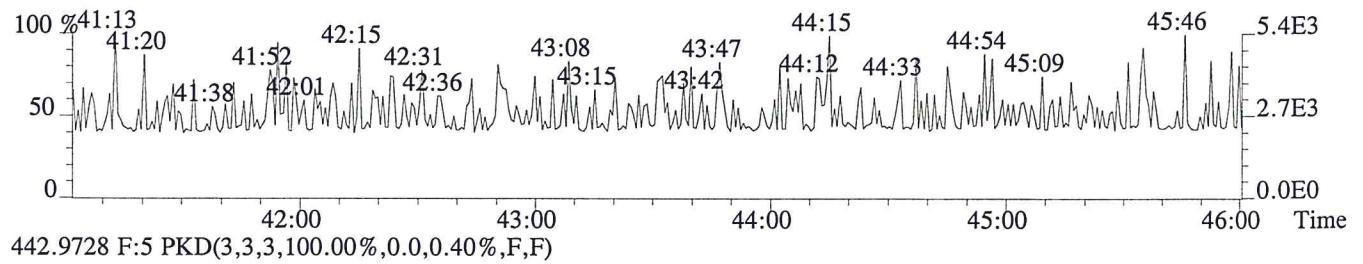
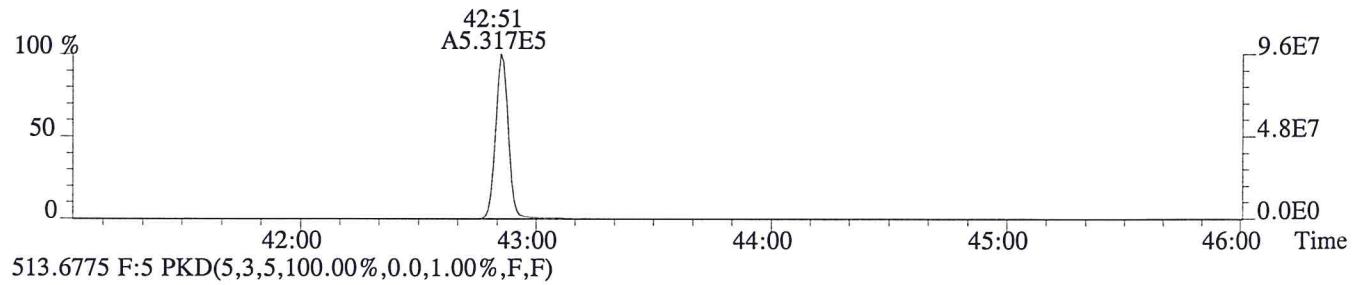
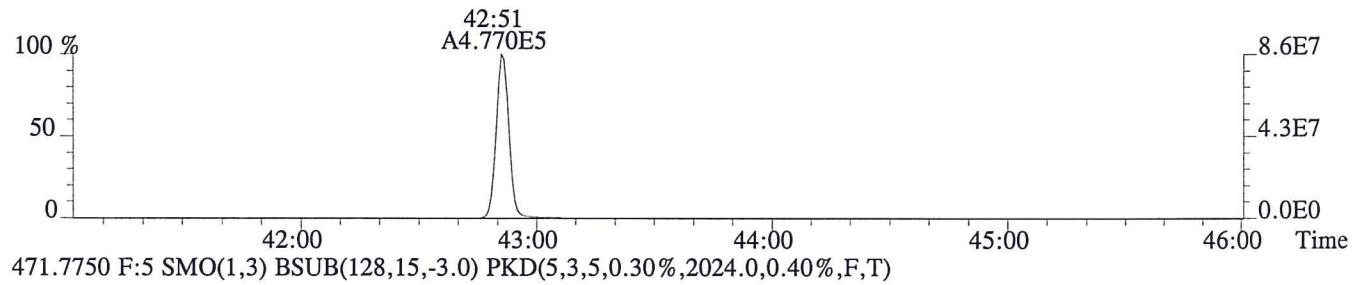
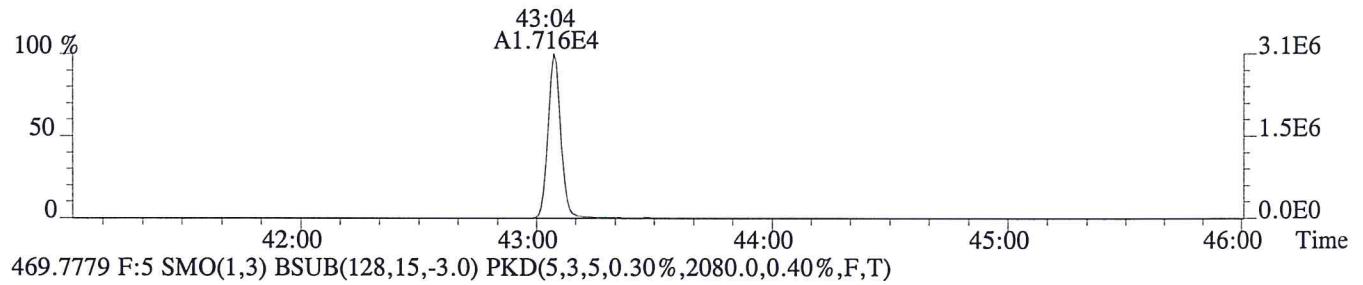
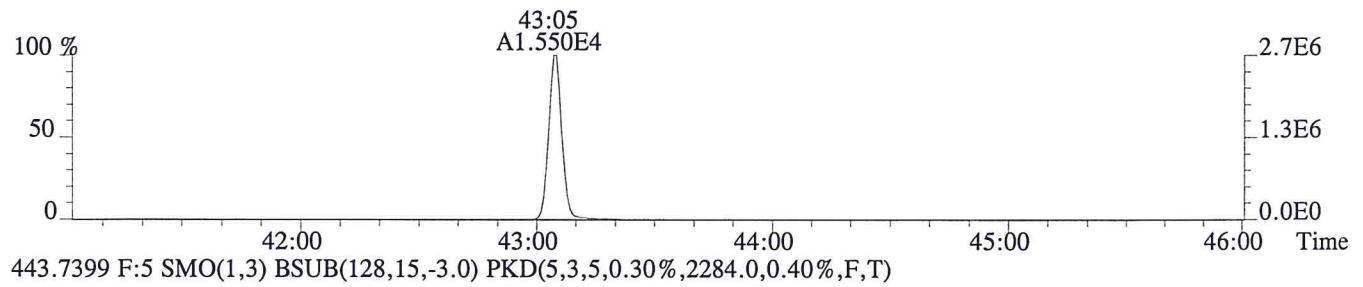
File:P600005 #1-213 Acq:19-AUG-2015 13:20:24 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:CS1  
 407.7818 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1508.0,0.50%,F,T)



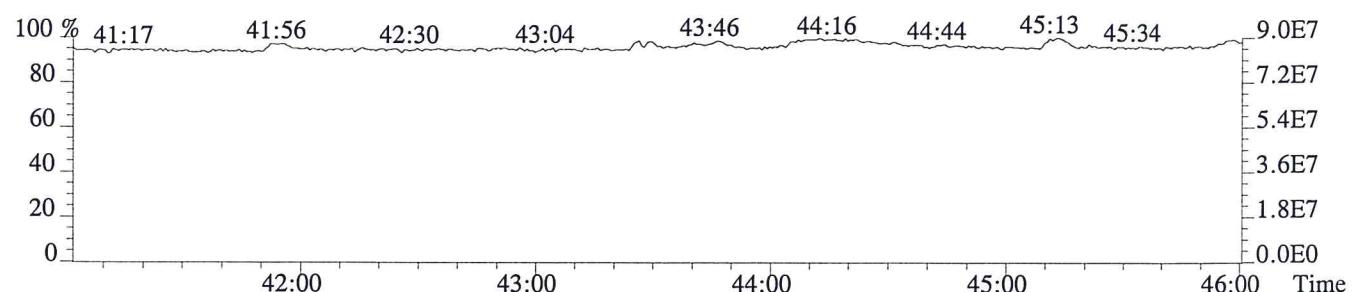
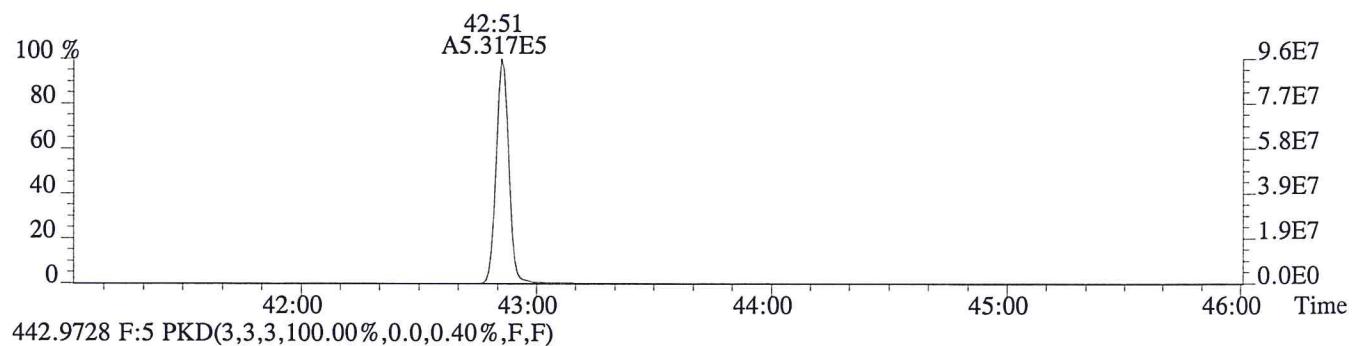
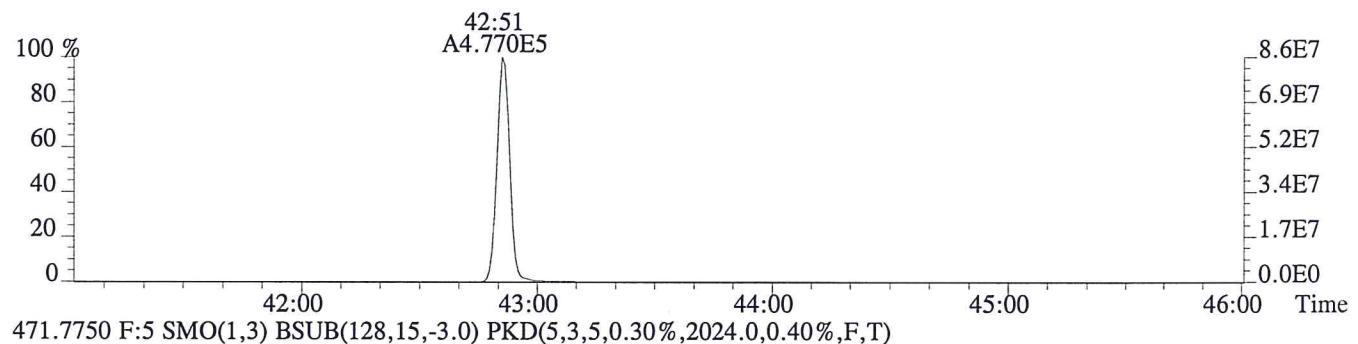
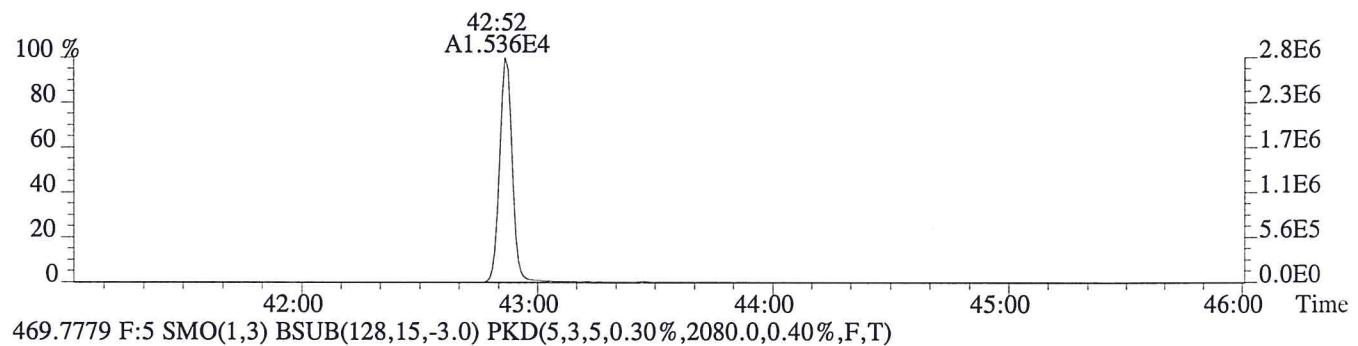
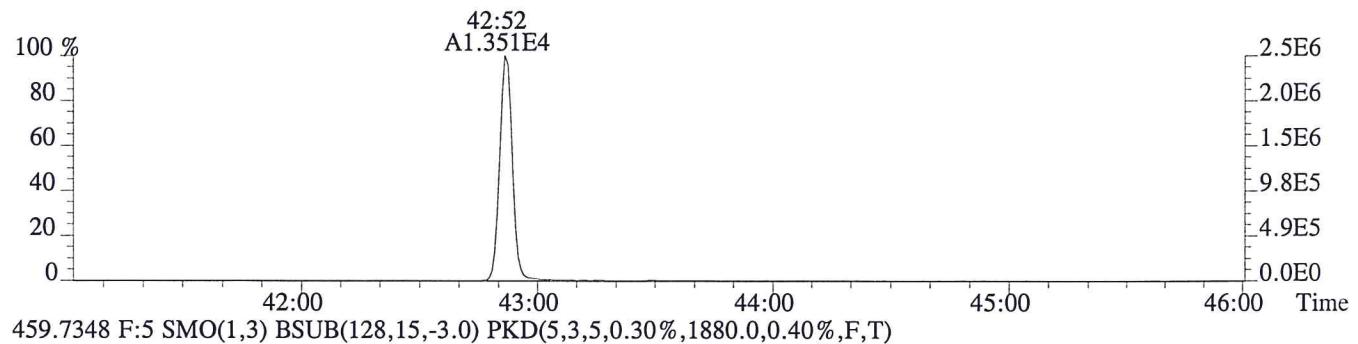
File:P600005 #1-213 Acq:19-AUG-2015 13:20:24 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:CS1  
 423.7766 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1488.0,0.40%,F,T)



File:P600005 #1-448 Acq:19-AUG-2015 13:20:24 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:CS1  
 441.7428 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1552.0,0.40%,F,T)



File:P600005 #1-448 Acq:19-AUG-2015 13:20:24 Probe EI+ Magnet SIR VG BioTech Mass spectf  
Sample#1 Exp:CS1  
457.7377 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1240.0,0.40%,F,T)



ALS ENVIRONMENTAL  
Sample Response Summary

CLIENT ID.  
76556

Run #3      Filename P600006      Samp: 1      Inj: 1      Acquired: 19-AUG-15 14:09:28  
Processed: 19-AUG-15 16:14:16      Sample ID: CS2

Typ	Name	RT-1	Resp 1	Resp 2	Ratio	Meet	Mod?	RRF
1 Unk	2,3,7,8-TCDF	29:04	6.831e+03	8.903e+03	0.77	yes	no	0.941
2 Unk	1,2,3,7,8-PeCDF	33:03	5.624e+04	3.620e+04	1.55	yes	no	0.987
3 Unk	2,3,4,7,8-PeCDF	33:55	5.470e+04	3.513e+04	1.56	yes	no	0.934
4 Unk	1,2,3,4,7,8-HxCDF	36:30	4.851e+04	4.061e+04	1.19	yes	no	1.189
5 Unk	1,2,3,6,7,8-HxCDF	36:37	4.902e+04	4.085e+04	1.20	yes	no	1.126
6 Unk	2,3,4,6,7,8-HxCDF	37:06	4.644e+04	3.802e+04	1.22	yes	no	1.116
7 Unk	1,2,3,7,8,9-HxCDF	37:50	4.318e+04	3.558e+04	1.21	yes	no	1.158
8 Unk	1,2,3,4,6,7,8-HpCDF	39:04	4.095e+04	3.921e+04	1.04	yes	no	1.373
9 Unk	1,2,3,4,7,8,9-HpCDF	40:30	3.945e+04	3.867e+04	1.02	yes	no	1.287
10 Unk	OCDF	43:04	4.756e+04	5.329e+04	0.89	yes	no	1.257
11 Unk	2,3,7,8-TCDD	29:48	6.531e+03	8.367e+03	0.78	yes	no	1.010
12 Unk	1,2,3,7,8-PeCDD	34:11	4.132e+04	2.625e+04	1.57	yes	no	0.932
13 Unk	1,2,3,4,7,8-HxCDD	37:13	3.390e+04	2.716e+04	1.25	yes	no	1.026
14 Unk	1,2,3,6,7,8-HxCDD	37:18	3.366e+04	2.706e+04	1.24	yes	no	1.021
15 Unk	1,2,3,7,8,9-HxCDD	37:32	3.749e+04	2.976e+04	1.26	yes	no	1.133
16 Unk	1,2,3,4,6,7,8-HpCDD	40:00	3.040e+04	2.966e+04	1.02	yes	no	1.034
17 Unk	OCDD	42:52	4.260e+04	4.727e+04	0.90	yes	no	1.111
18 IS	13C-2,3,7,8-TCDF	29:03	3.756e+05	4.770e+05	0.79	yes	no	1.379
19 IS	13C-1,2,3,7,8-PeCDF	33:02	5.735e+05	3.632e+05	1.58	yes	no	1.456
20 IS	13C-2,3,4,7,8-PeCDF	33:54	5.834e+05	3.699e+05	1.58	yes	no	1.465
21 IS	13C-1,2,3,4,7,8-HxCDF	36:30	2.587e+05	4.931e+05	0.52	yes	no	1.075
22 IS	13C-1,2,3,6,7,8-HxCDF	36:36	2.746e+05	5.242e+05	0.52	yes	no	1.158
23 IS	13C-2,3,4,6,7,8-HxCDF	37:05	2.607e+05	4.955e+05	0.53	yes	no	1.133
24 IS	13C-1,2,3,7,8,9-HxCDF	37:49	2.327e+05	4.478e+05	0.52	yes	no	1.024
25 IS	13C-1,2,3,4,6,7,8-HpCDF	39:03	1.791e+05	4.052e+05	0.44	yes	no	0.880
26 IS	13C-1,2,3,4,7,8,9-HpCDF	40:29	1.869e+05	4.195e+05	0.45	yes	no	0.914
27 IS	13C-2,3,7,8-TCDD	29:47	3.240e+05	4.110e+05	0.79	yes	no	1.193
28 IS	13C-1,2,3,7,8-PeCDD	34:11	4.400e+05	2.800e+05	1.57	yes	no	1.094
29 IS	13C-1,2,3,4,7,8-HxCDD	37:13	3.350e+05	2.646e+05	1.27	yes	no	0.906
30 IS	13C-1,2,3,6,7,8-HxCDD	37:18	3.326e+05	2.649e+05	1.26	yes	no	0.860
31 IS	13C-1,2,3,4,6,7,8-HpCDD	39:59	3.000e+05	2.829e+05	1.06	yes	no	0.892
32 IS	13C-OCDD	42:51	3.844e+05	4.278e+05	0.90	yes	no	0.642
33 RS/RT	13C-1,2,3,4-TCDD	29:15	2.808e+05	3.530e+05	0.80	yes	no	-
34 RS/RT	13C-1,2,3,7,8,9-HxCDD	37:32	3.755e+05	2.984e+05	1.26	yes	no	-
35 C/Up	37Cl-2,3,7,8-TCDD	29:48	1.549e+04				no	1.263

---

ALS ENVIRONMENTAL  
10450 Stancliff Rd, Suite 115  
Houston, TX 77099  
Office (713) 266-1599. Fax (713) 266-0130

www.alsglobal.com

ALS ENVIRONMENTAL  
Signal/Noise Height Ratio Summary

CLIENT ID.  
76556

Run #3   Filename P600006              Samp: 1    Inj: 1              Acquired: 19-AUG-15 14:09:28  
Processed: 19-AUG-15 16:14:16              LAB. ID: CS2

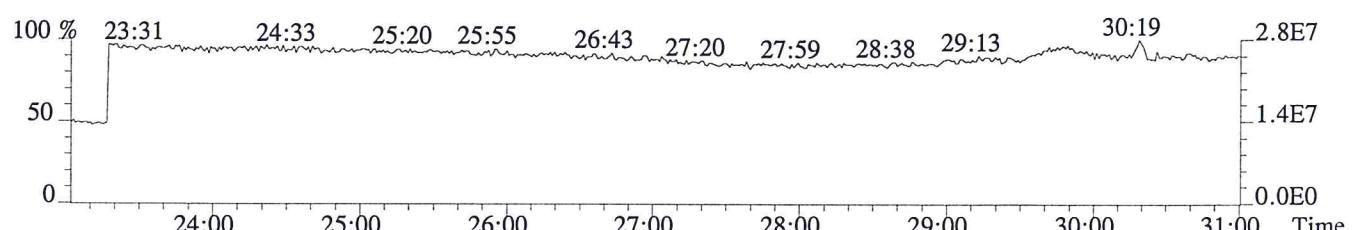
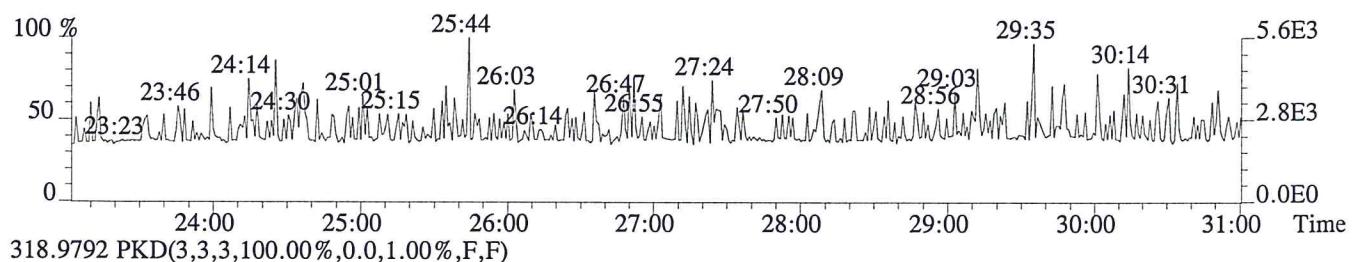
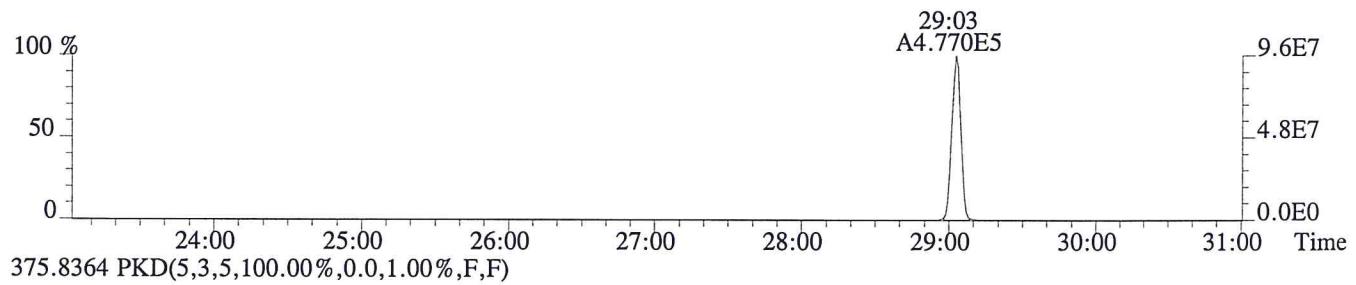
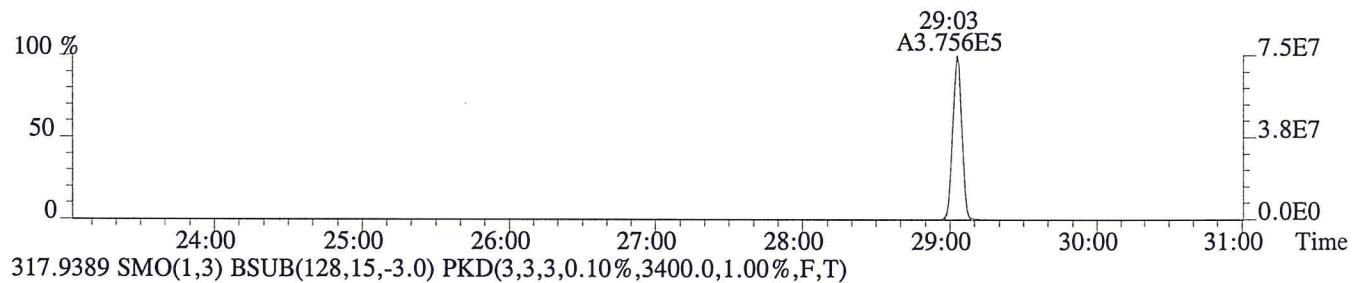
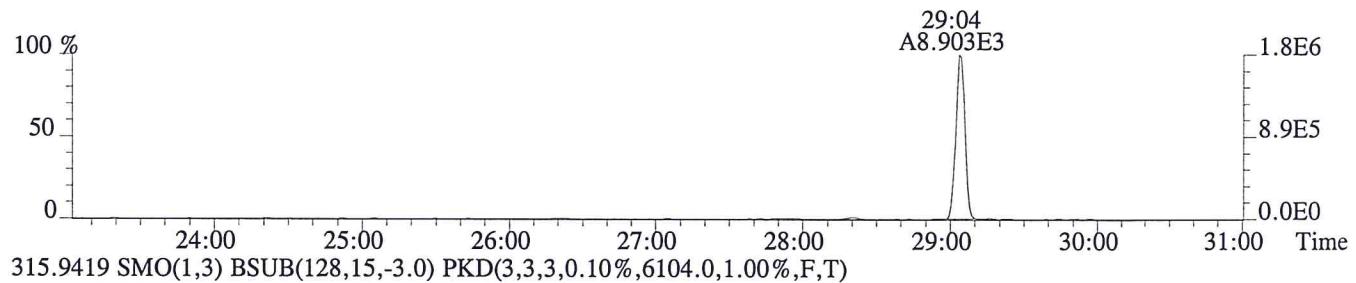
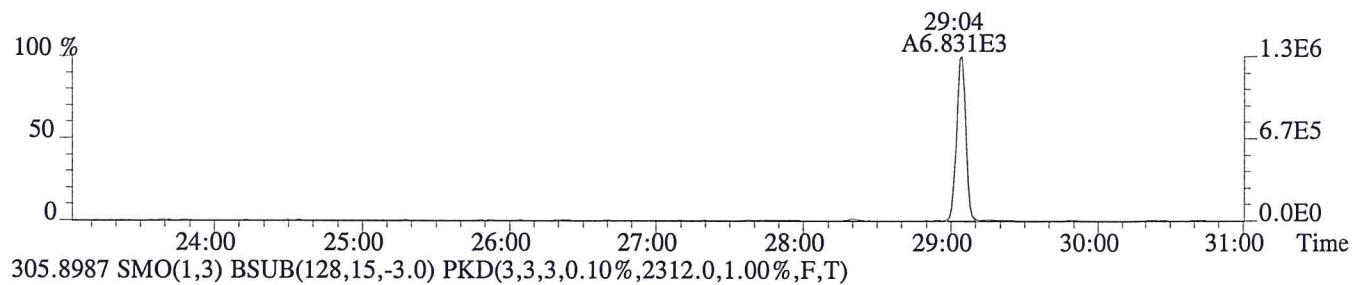
	Name	Signal 1	Noise 1	S/N Rat.1	Signal 2	Noise 2	S/N Rat.2
--	------	----------	---------	-----------	----------	---------	-----------

1	2,3,7,8-TCDF	1.33e+06	1.92e+03	7.0e+02	1.77e+06	2.31e+03	7.7e+02
2	1,2,3,7,8-PeCDF	1.11e+07	2.06e+03	5.4e+03	7.11e+06	4.36e+03	1.6e+03
3	2,3,4,7,8-PeCDF	1.15e+07	2.06e+03	5.6e+03	7.43e+06	4.36e+03	1.7e+03
4	1,2,3,4,7,8-HxCDF	1.11e+07	2.51e+03	4.4e+03	9.27e+06	1.32e+03	7.0e+03
5	1,2,3,6,7,8-HxCDF	1.09e+07	2.51e+03	4.3e+03	8.97e+06	1.32e+03	6.8e+03
6	2,3,4,6,7,8-HxCDF	1.09e+07	2.51e+03	4.3e+03	8.92e+06	1.32e+03	6.8e+03
7	1,2,3,7,8,9-HxCDF	9.44e+06	2.51e+03	3.8e+03	7.85e+06	1.32e+03	5.9e+03
8	1,2,3,4,6,7,8-HpCDF	9.29e+06	2.30e+03	4.0e+03	8.87e+06	2.67e+03	3.3e+03
9	1,2,3,4,7,8,9-HpCDF	8.32e+06	2.30e+03	3.6e+03	8.08e+06	2.67e+03	3.0e+03
10	OCDF	8.71e+06	1.61e+03	5.4e+03	9.69e+06	2.88e+03	3.4e+03
11	2,3,7,8-TCDD	1.36e+06	1.46e+03	9.3e+02	1.76e+06	1.87e+03	9.4e+02
12	1,2,3,7,8-PeCDD	8.89e+06	2.56e+03	3.5e+03	5.63e+06	1.18e+03	4.8e+03
13	1,2,3,4,7,8-HxCDD	7.85e+06	1.48e+03	5.3e+03	6.25e+06	2.25e+03	2.8e+03
14	1,2,3,6,7,8-HxCDD	7.75e+06	1.48e+03	5.2e+03	6.23e+06	2.25e+03	2.8e+03
15	1,2,3,7,8,9-HxCDD	8.75e+06	1.48e+03	5.9e+03	6.96e+06	2.25e+03	3.1e+03
16	1,2,3,4,6,7,8-HpCDD	6.55e+06	1.72e+03	3.8e+03	6.45e+06	1.38e+03	4.7e+03
17	OCDD	8.05e+06	1.17e+03	6.9e+03	8.97e+06	2.14e+03	4.2e+03
18	13C-2,3,7,8-TCDF	7.51e+07	6.10e+03	1.2e+04	9.59e+07	3.40e+03	2.8e+04
19	13C-1,2,3,7,8-PeCDF	1.15e+08	9.08e+02	1.3e+05	7.32e+07	2.60e+03	2.8e+04
20	13C-2,3,4,7,8-PeCDF	1.23e+08	9.08e+02	1.4e+05	7.86e+07	2.60e+03	3.0e+04
21	13C-1,2,3,4,7,8-HxCDF	5.85e+07	2.50e+03	2.3e+04	1.11e+08	3.68e+03	3.0e+04
22	13C-1,2,3,6,7,8-HxCDF	6.06e+07	2.50e+03	2.4e+04	1.14e+08	3.68e+03	3.1e+04
23	13C-2,3,4,6,7,8-HxCDF	6.08e+07	2.50e+03	2.4e+04	1.15e+08	3.68e+03	3.1e+04
24	13C-1,2,3,7,8,9-HxCDF	5.10e+07	2.50e+03	2.0e+04	9.88e+07	3.68e+03	2.7e+04
25	13C-1,2,3,4,6,7,8-HpCDF	4.06e+07	6.06e+03	6.7e+03	9.25e+07	1.74e+04	5.3e+03
26	13C-1,2,3,4,7,8,9-HpCDF	3.94e+07	6.06e+03	6.5e+03	8.82e+07	1.74e+04	5.1e+03
27	13C-2,3,7,8-TCDD	6.67e+07	1.14e+04	5.9e+03	8.49e+07	5.64e+03	1.5e+04
28	13C-1,2,3,7,8-PeCDD	9.46e+07	2.58e+03	3.7e+04	5.97e+07	1.92e+03	3.1e+04
29	13C-1,2,3,4,7,8-HxCDD	7.70e+07	6.96e+03	1.1e+04	6.12e+07	3.23e+03	1.9e+04
30	13C-1,2,3,6,7,8-HxCDD	7.58e+07	6.96e+03	1.1e+04	6.04e+07	3.23e+03	1.9e+04
31	13C-1,2,3,4,6,7,8-HpCDD	6.47e+07	2.50e+03	2.6e+04	6.11e+07	1.71e+03	3.6e+04
32	13C-OCDD	7.28e+07	1.45e+03	5.0e+04	8.10e+07	1.89e+03	4.3e+04
33	13C-1,2,3,4-TCDD	5.80e+07	1.14e+04	5.1e+03	7.31e+07	5.64e+03	1.3e+04
34	13C-1,2,3,7,8,9-HxCDD	8.72e+07	6.96e+03	1.3e+04	6.94e+07	3.23e+03	2.1e+04
35	37Cl-2,3,7,8-TCDD	3.31e+06	3.01e+03	1.1e+03			

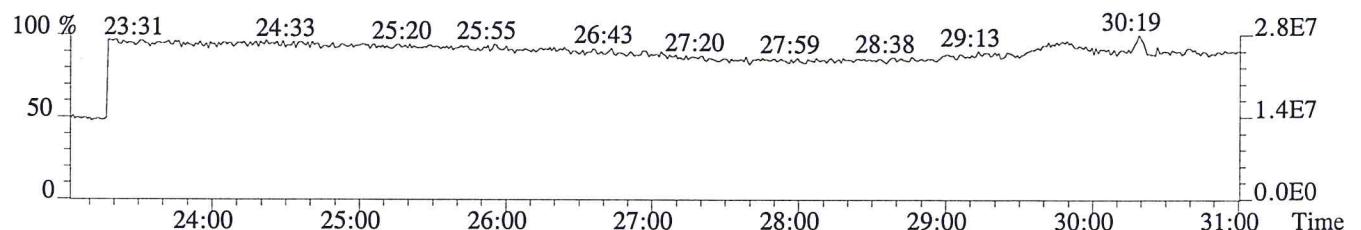
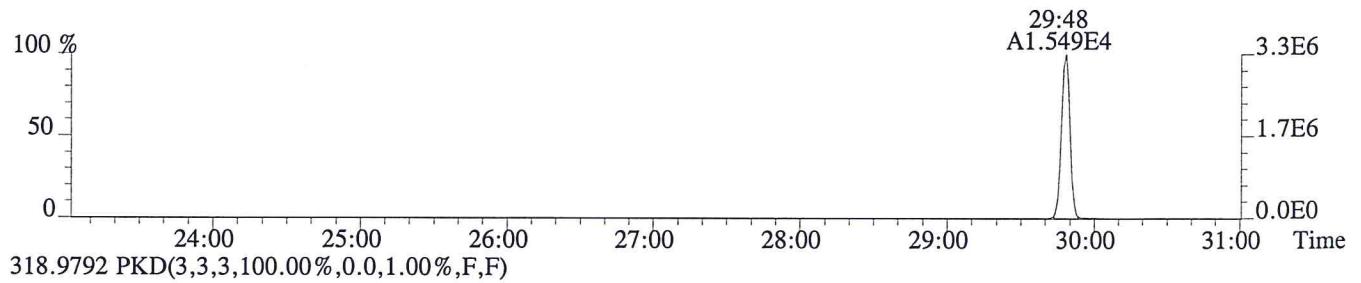
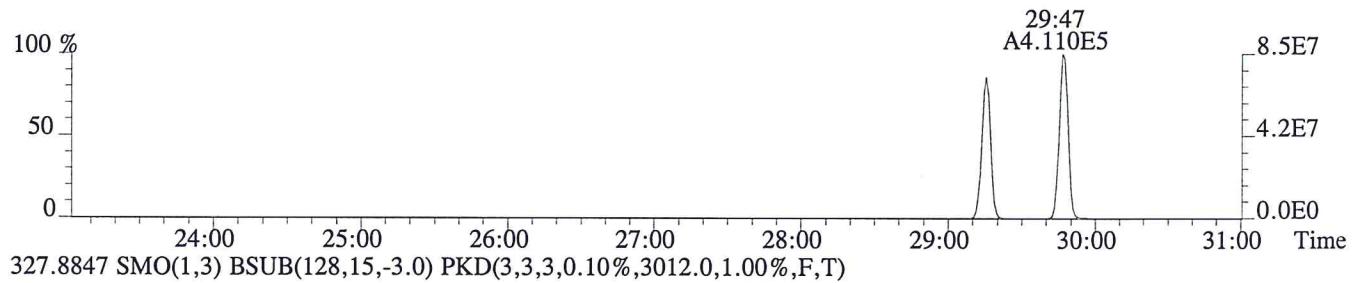
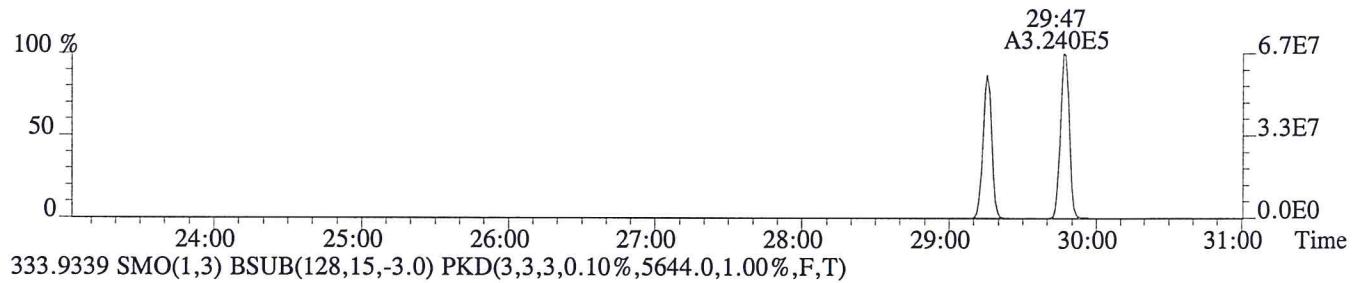
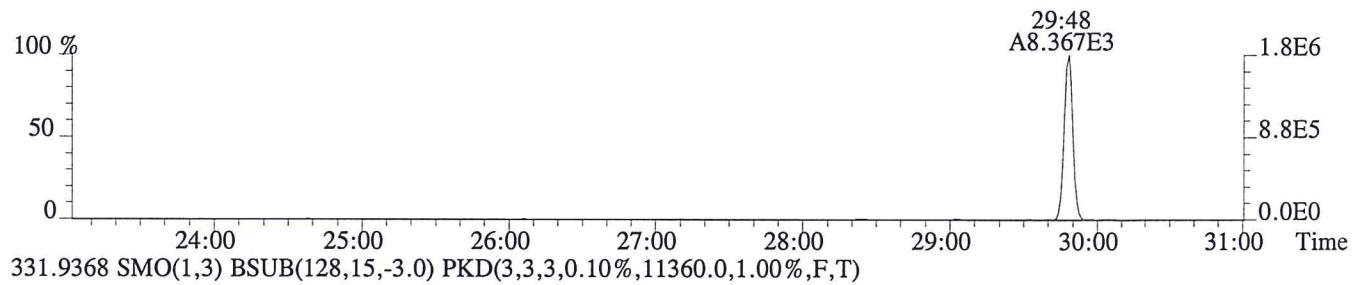
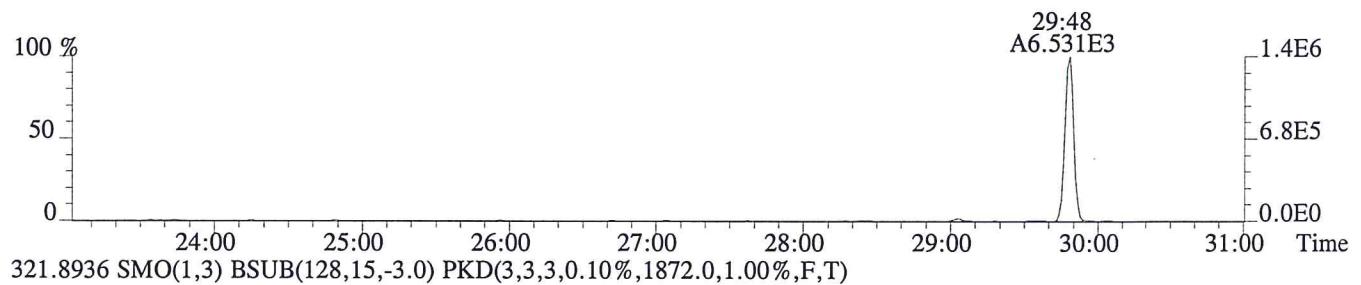
---

ALS ENVIRONMENTAL  
10450 Stancliff Rd., Suite 115  
Houston, TX 77099  
Office: (713) 266-1599. Fax: (713) 266-0130

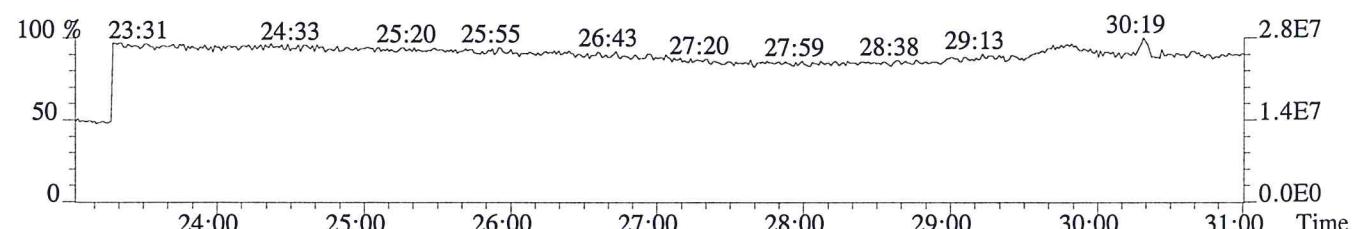
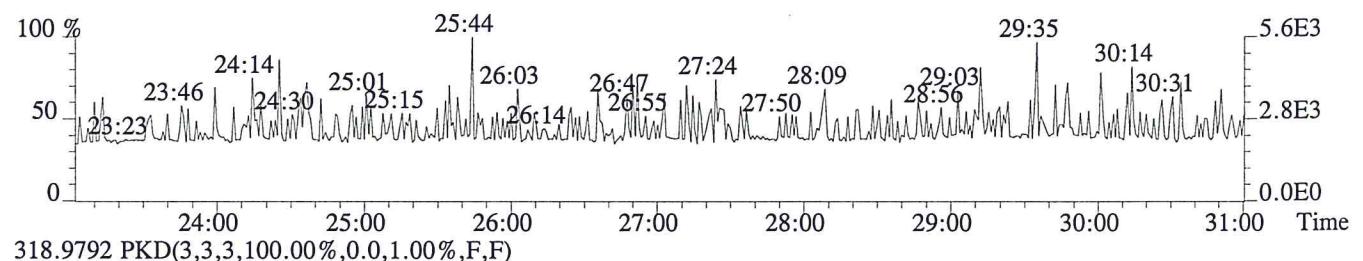
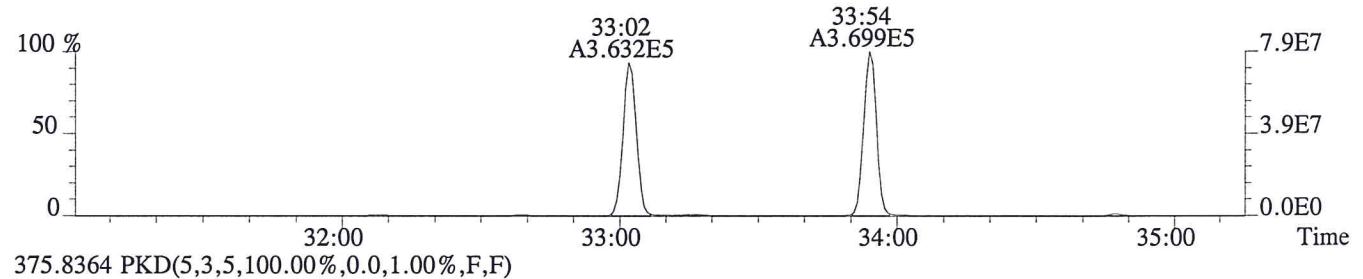
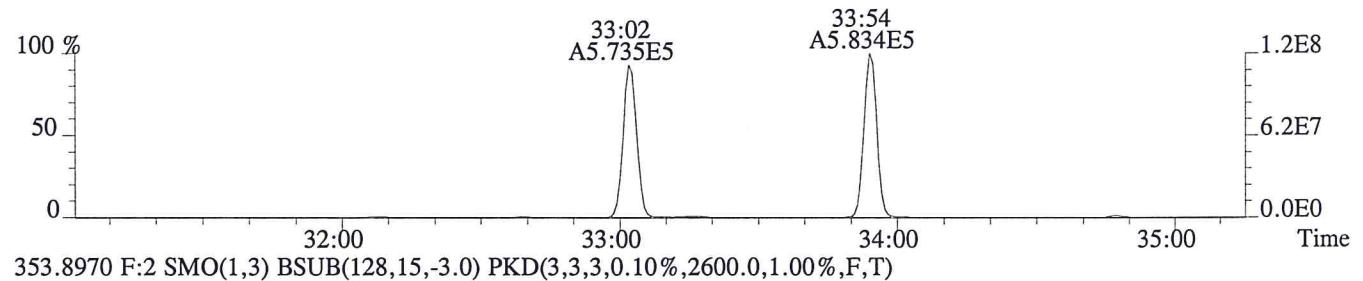
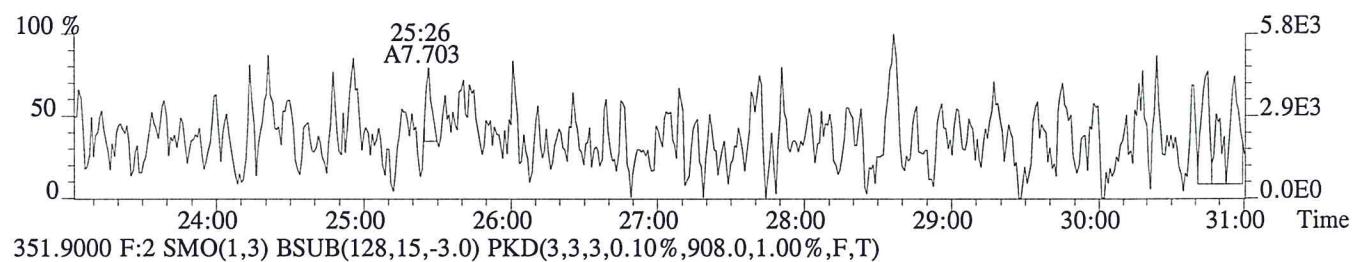
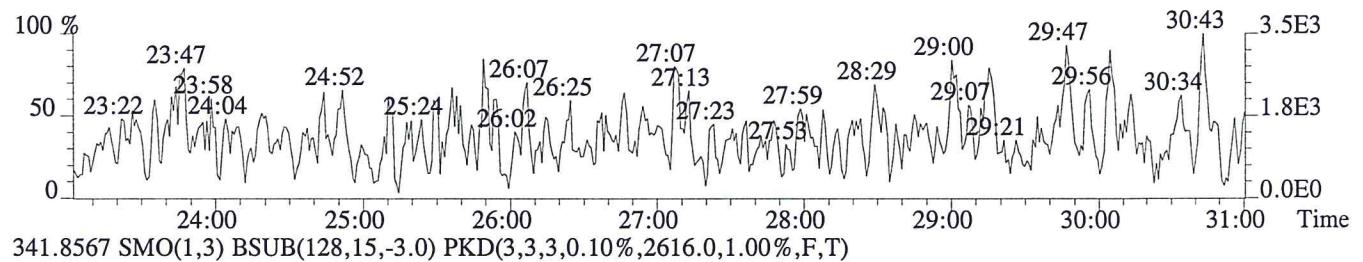
File:P600006 #1-566 Acq:19-AUG-2015 14:09:28 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:CS2  
 303.9016 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1916.0,1.00%,F,T)



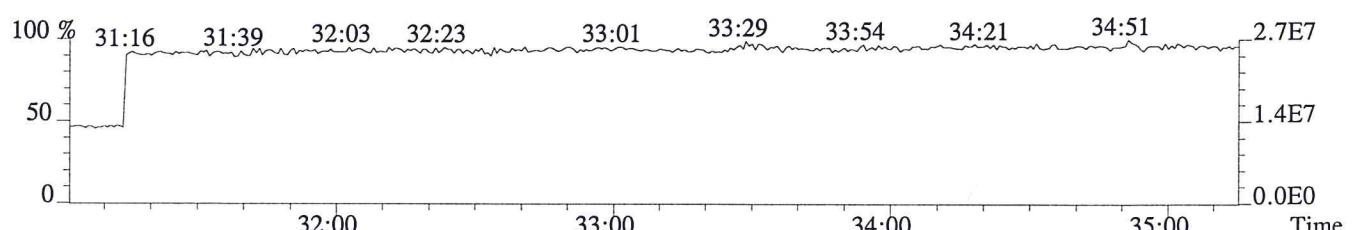
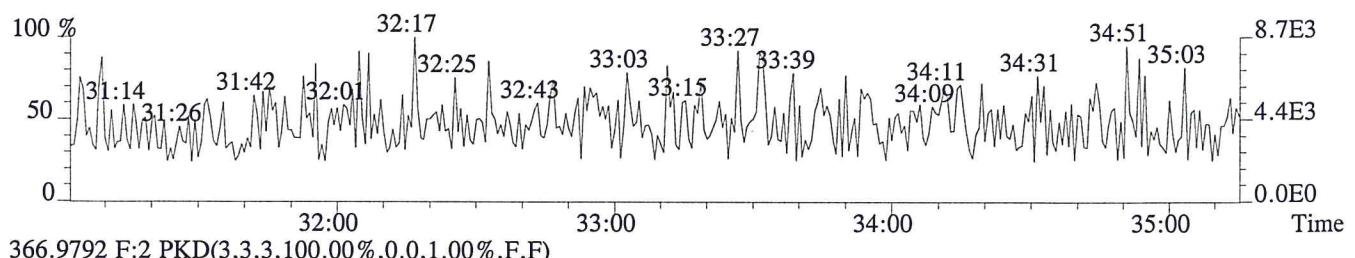
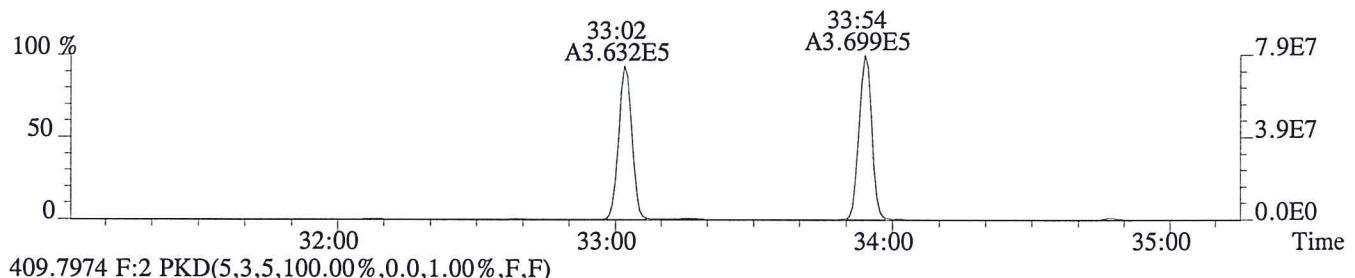
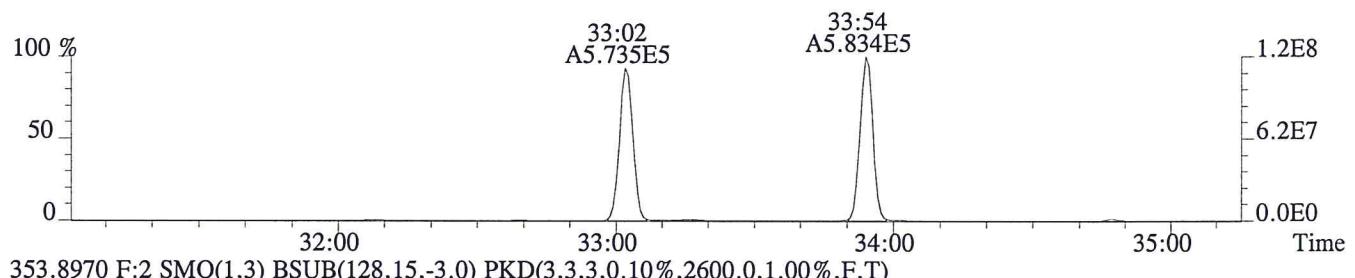
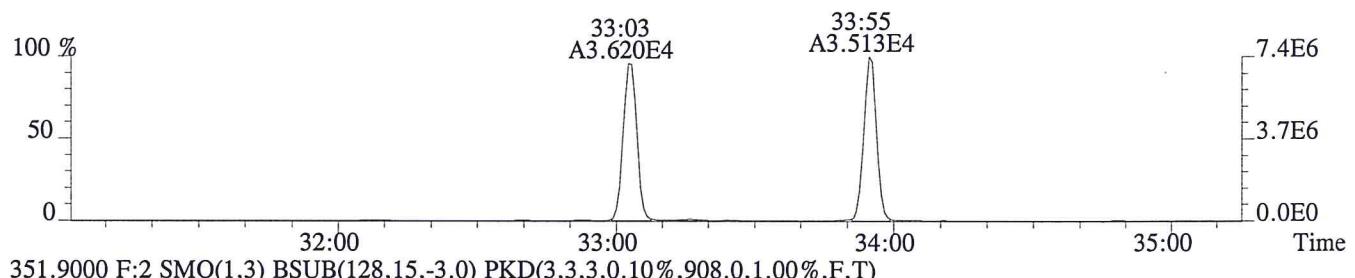
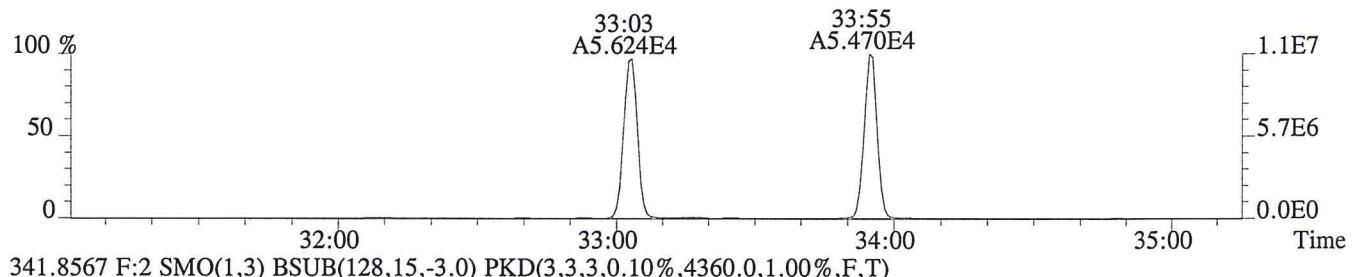
File:P600006 #1-566 Acq:19-AUG-2015 14:09:28 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:CS2  
 319.8965 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1456.0,1.00%,F,T)



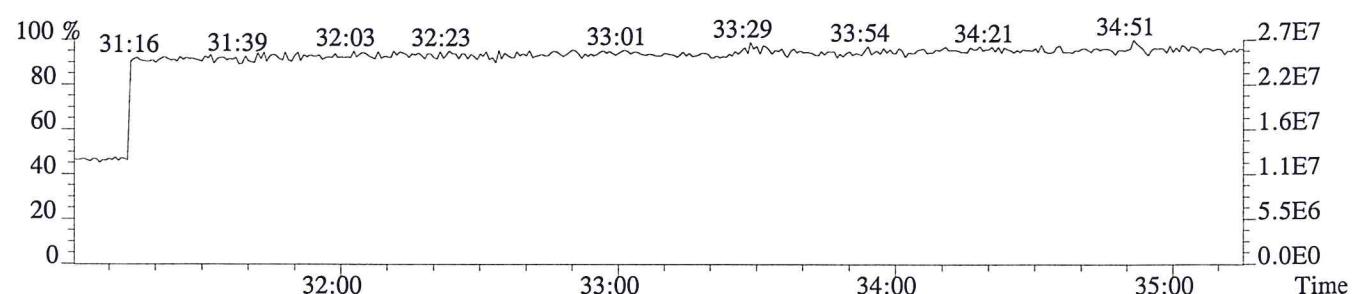
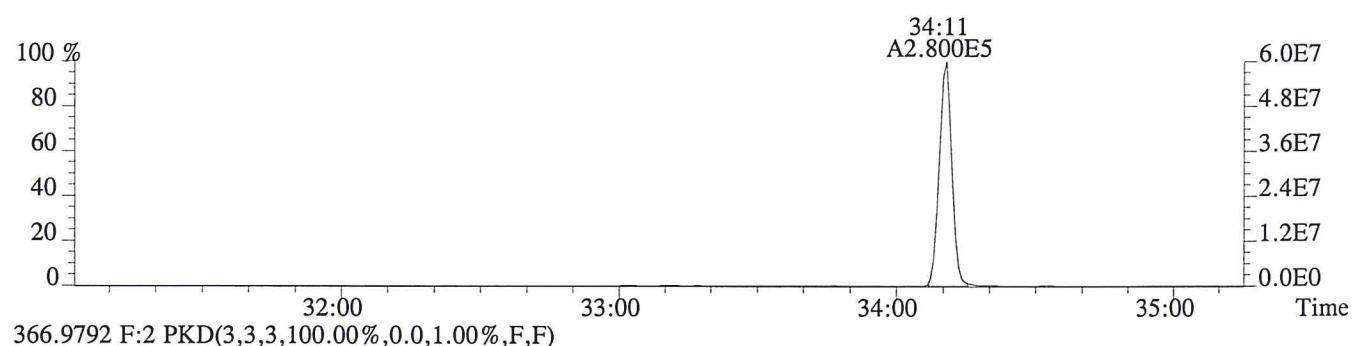
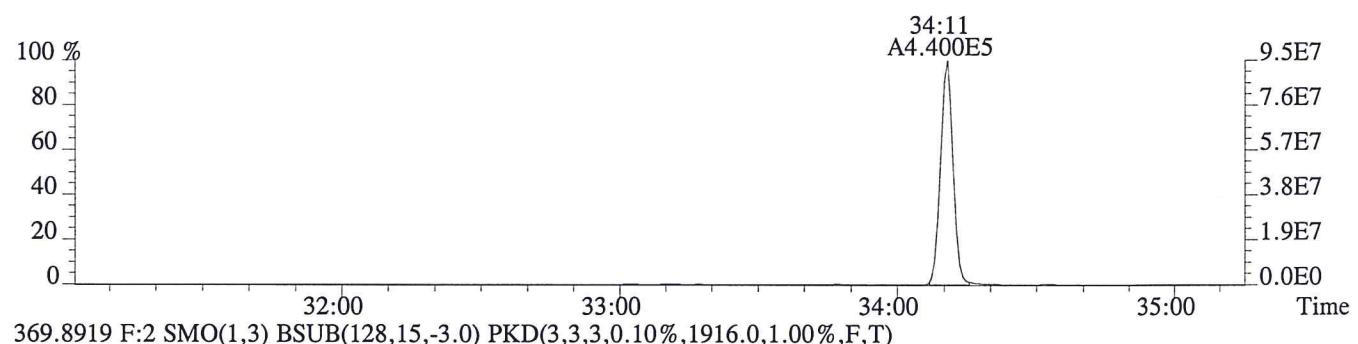
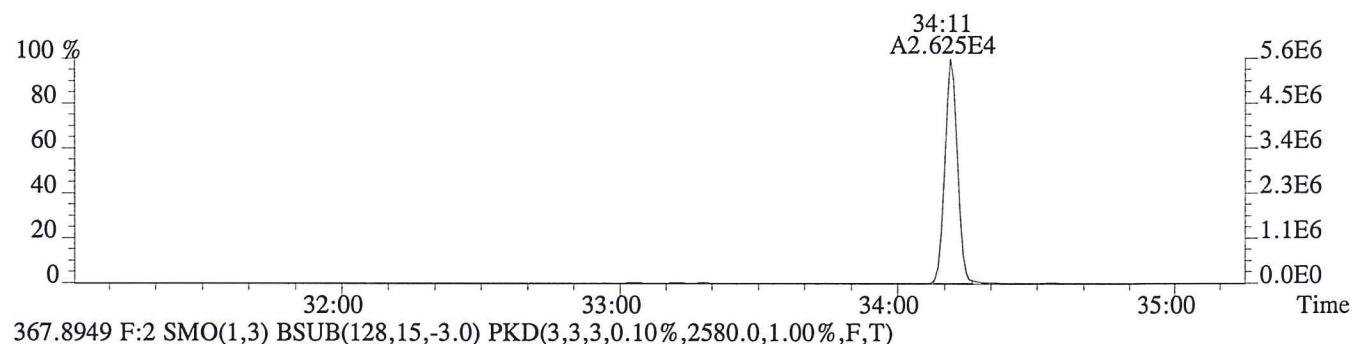
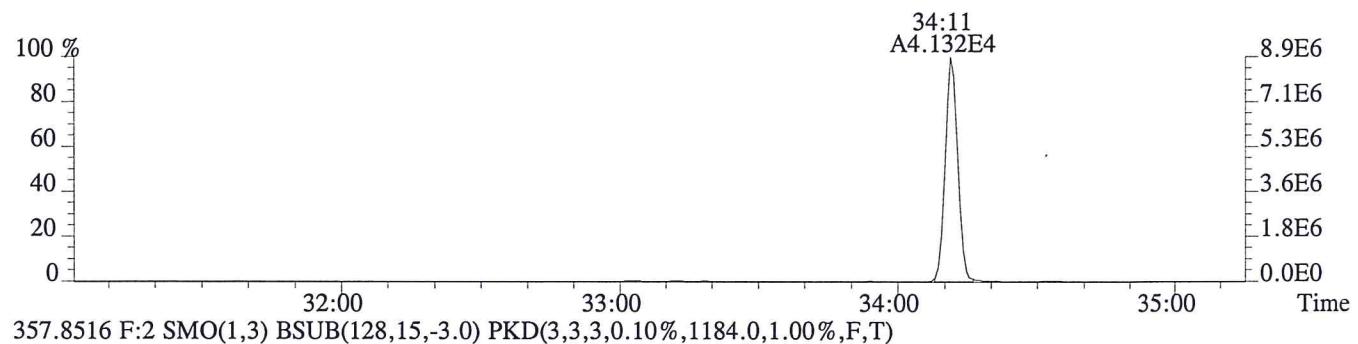
File:P600006 #1-566 Acq:19-AUG-2015 14:09:28 Probe EI+ Magnet SIR VG BioTech Mass spect&  
 Sample#1 Exp:CS2  
 339.8597 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1496.0,1.00%,F,T)



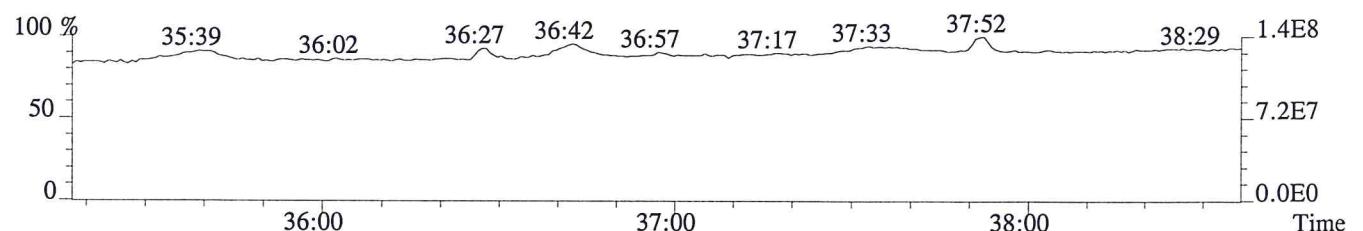
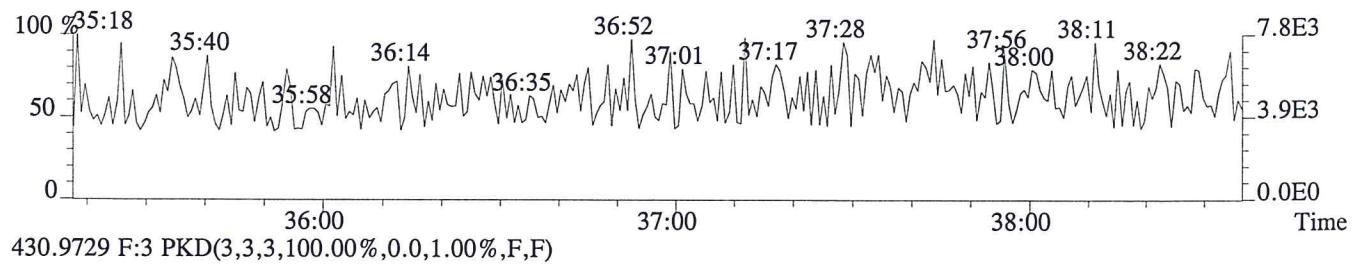
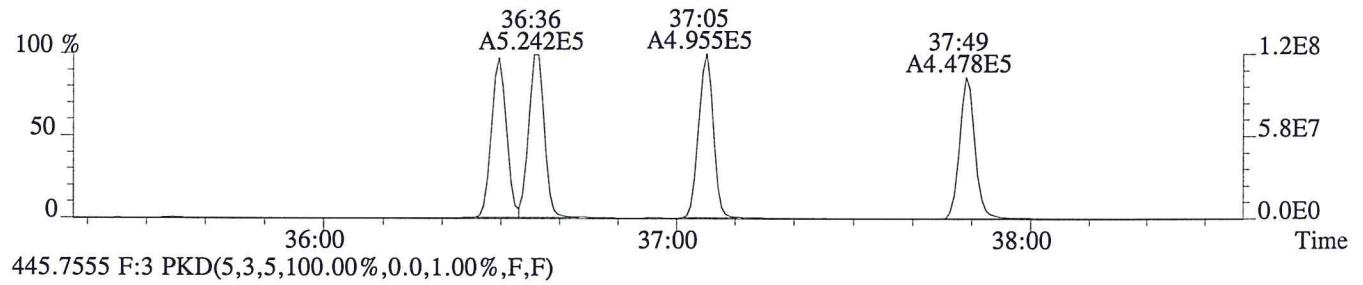
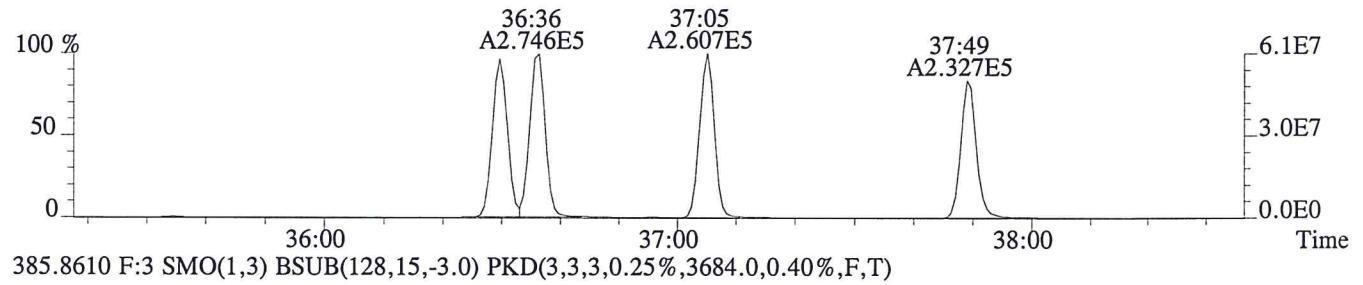
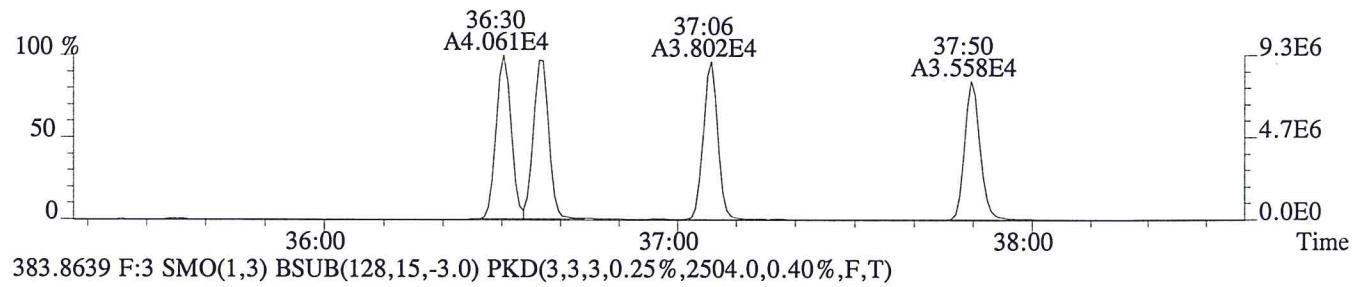
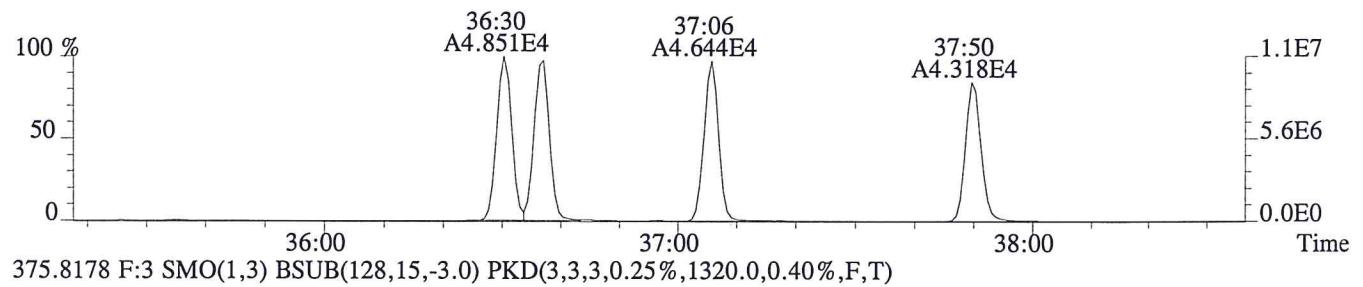
File:P600006 #1-380 Acq:19-AUG-2015 14:09:28 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:CS2  
 339.8597 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,2060.0,1.00%,F,T)



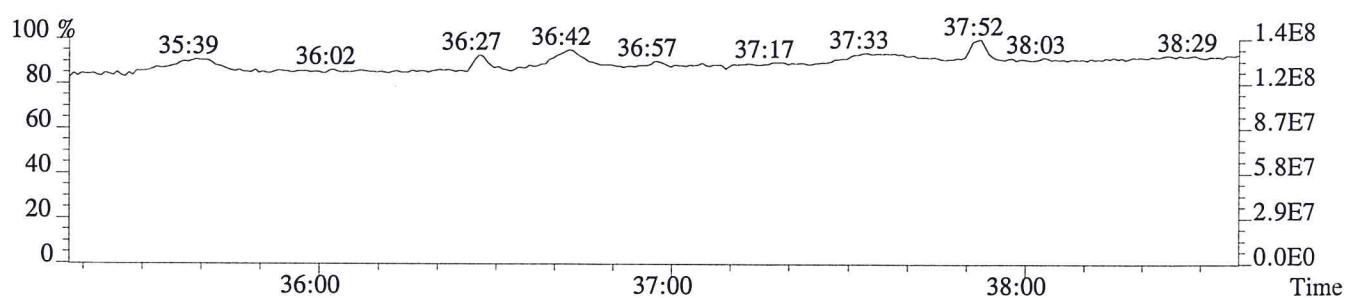
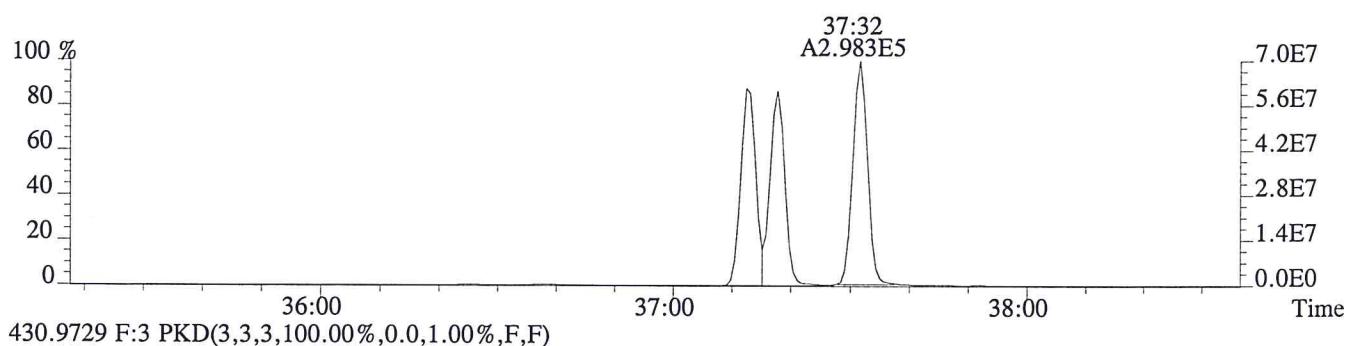
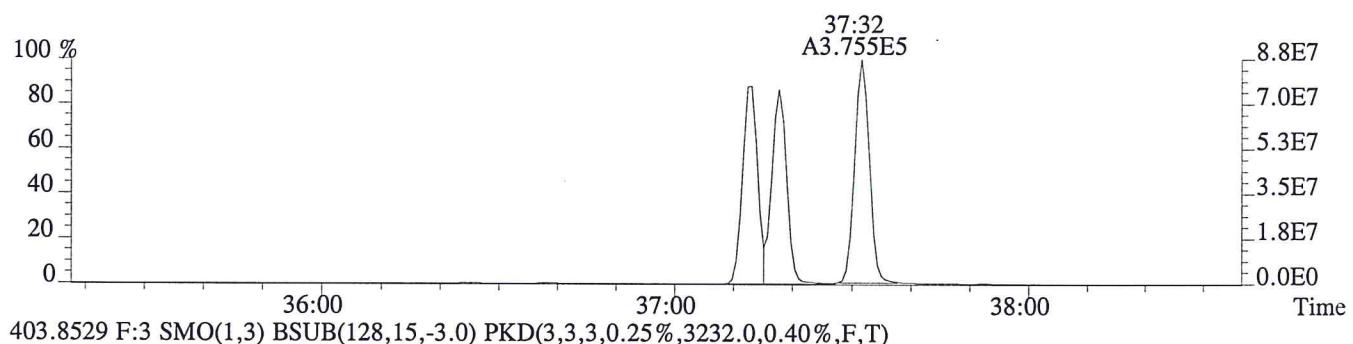
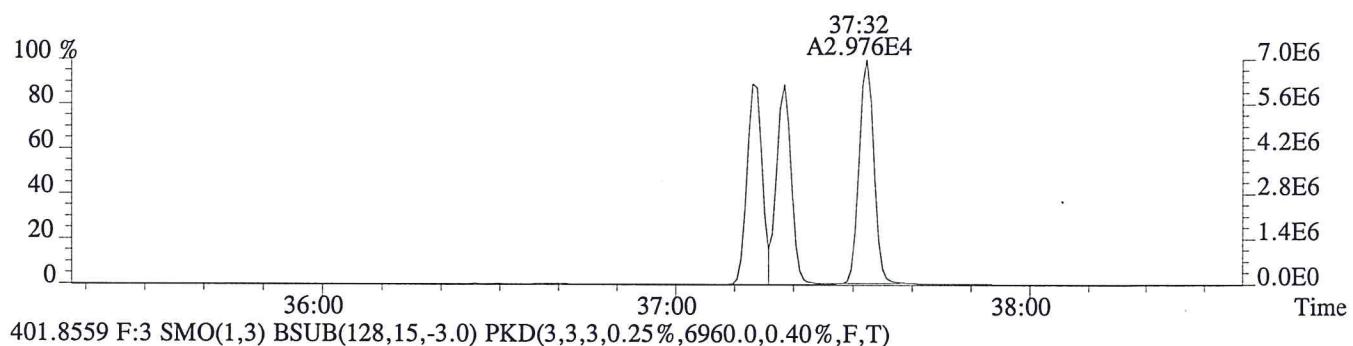
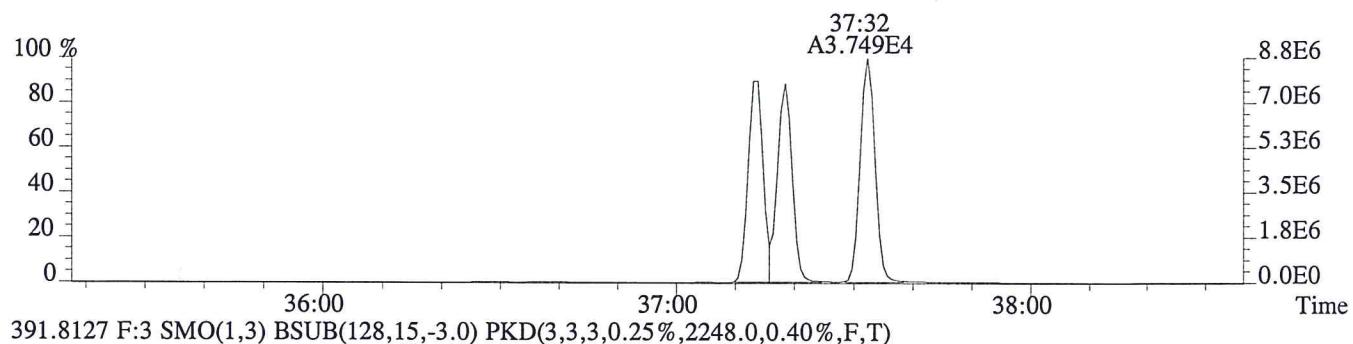
File:P600006 #1-380 Acq:19-AUG-2015 14:09:28 Probe EI+ Magnet SIR VG BioTech Mass spectf  
Sample#1 Exp:CS2  
355.8546 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,2564.0,1.00%,F,T)



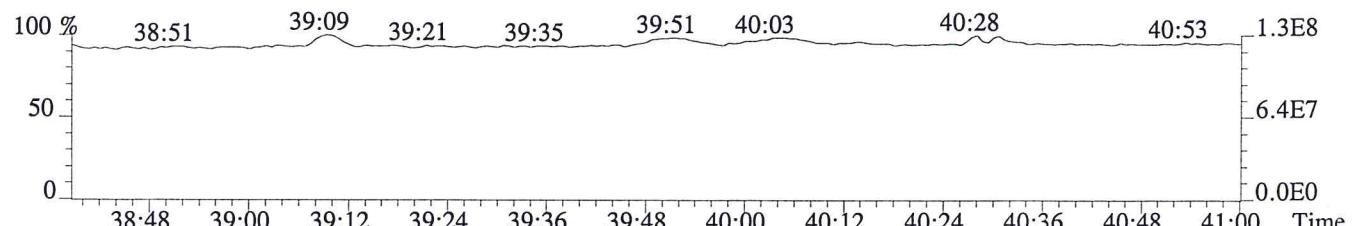
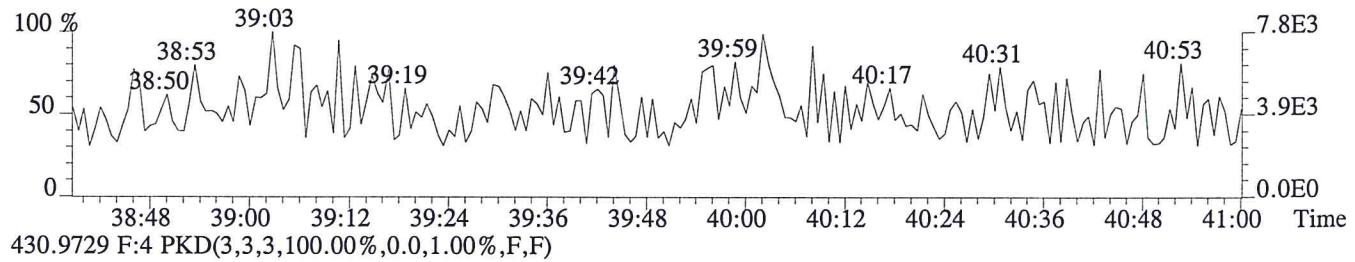
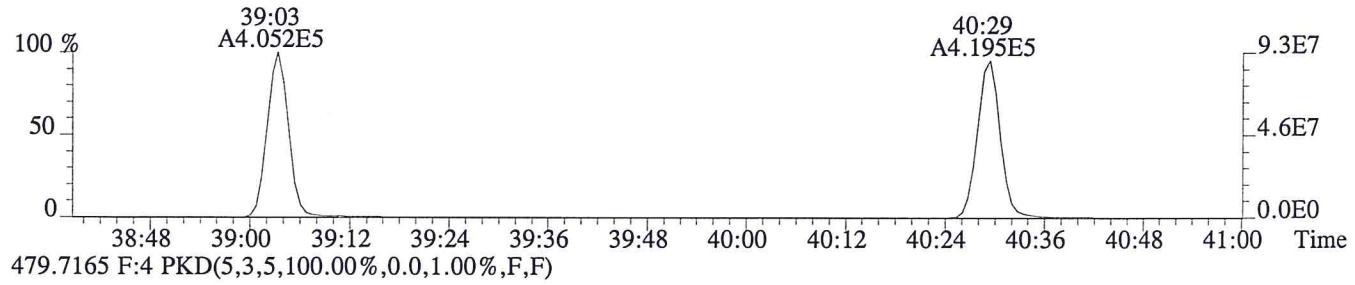
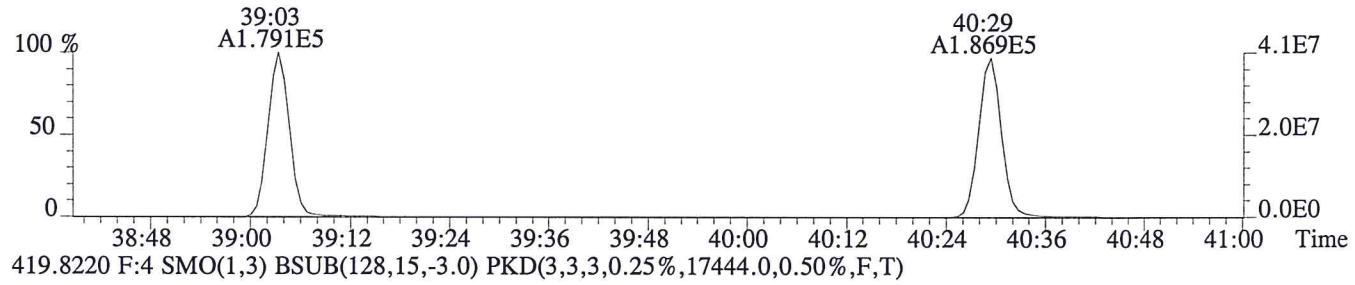
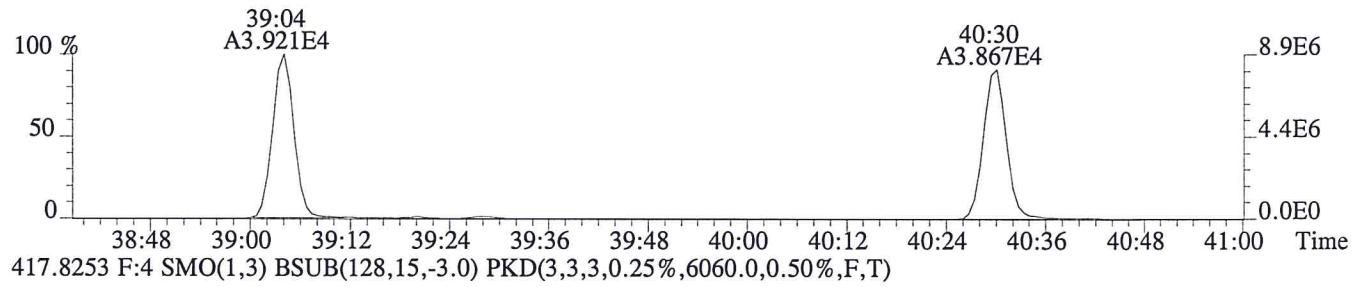
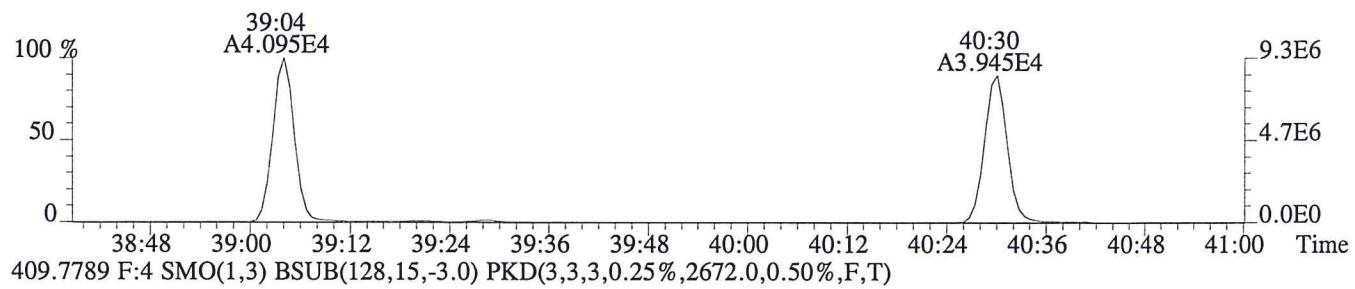
File:P600006 #1-299 Acq:19-AUG-2015 14:09:28 Probe EI+ Magnet SIR VG BioTech Mass spect&  
 Sample#1 Exp:CS2  
 373.8208 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,2512.0,0.40%,F,T)



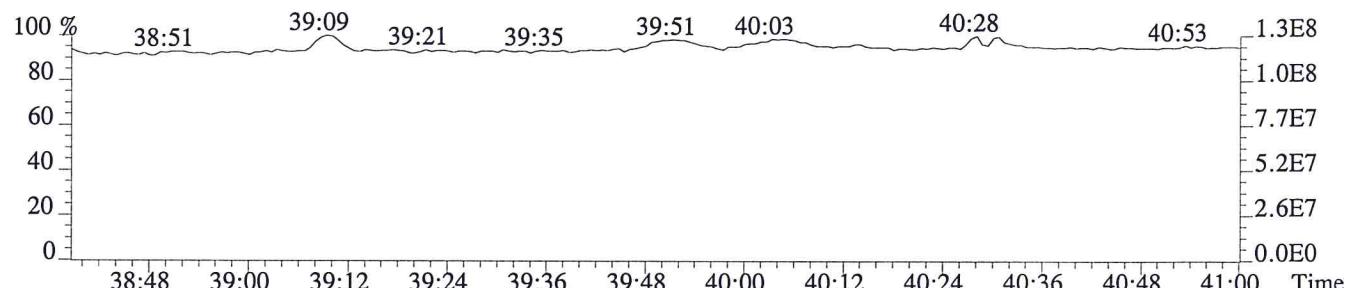
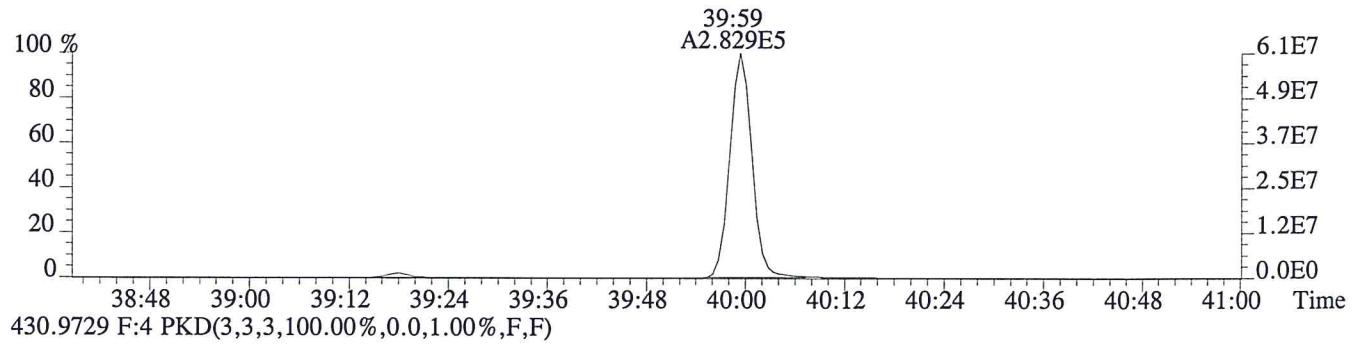
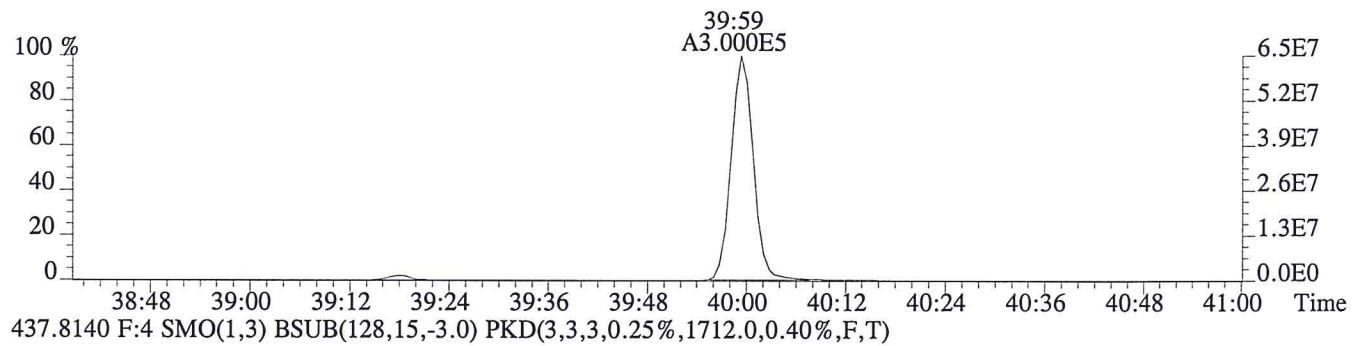
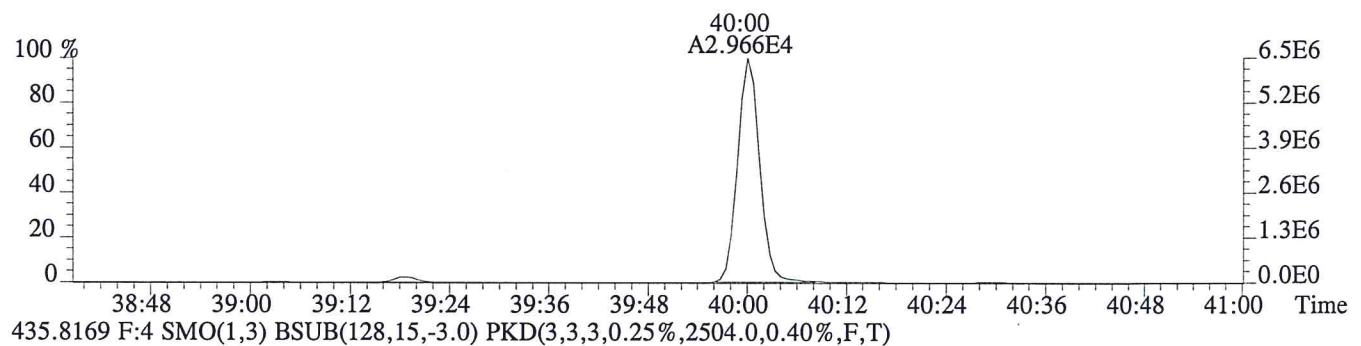
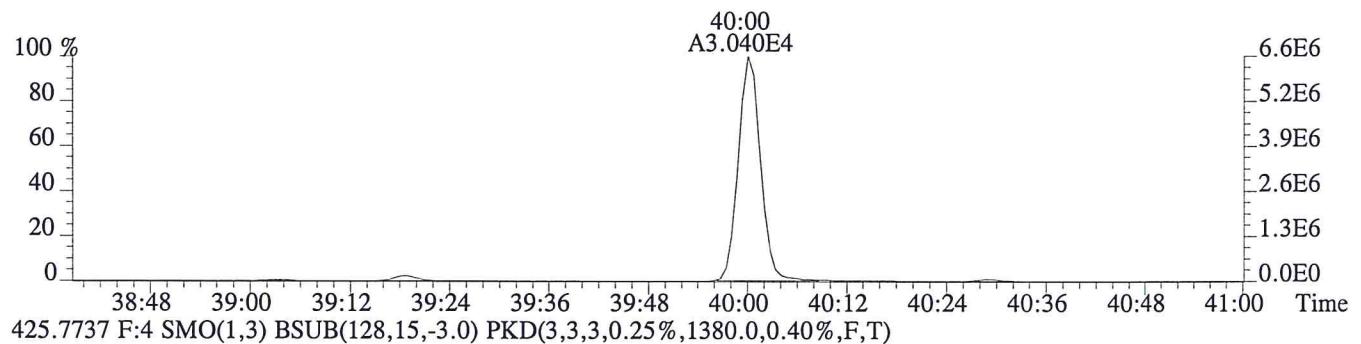
File:P600006 #1-299 Acq:19-AUG-2015 14:09:28 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:CS2  
 389.8157 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1476.0,0.40%,F,T)



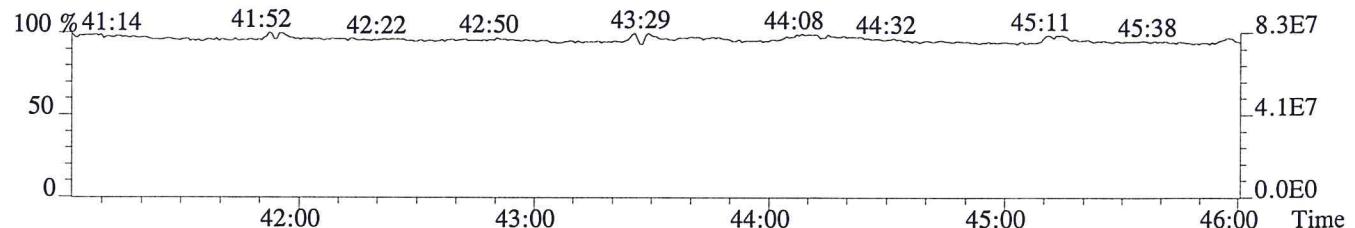
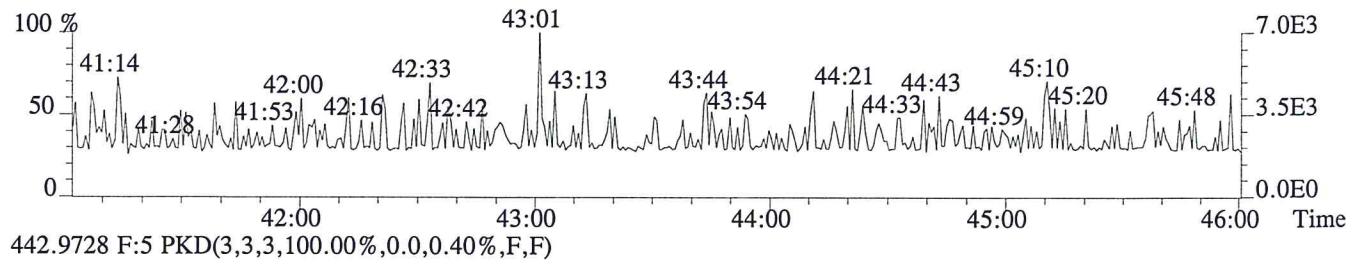
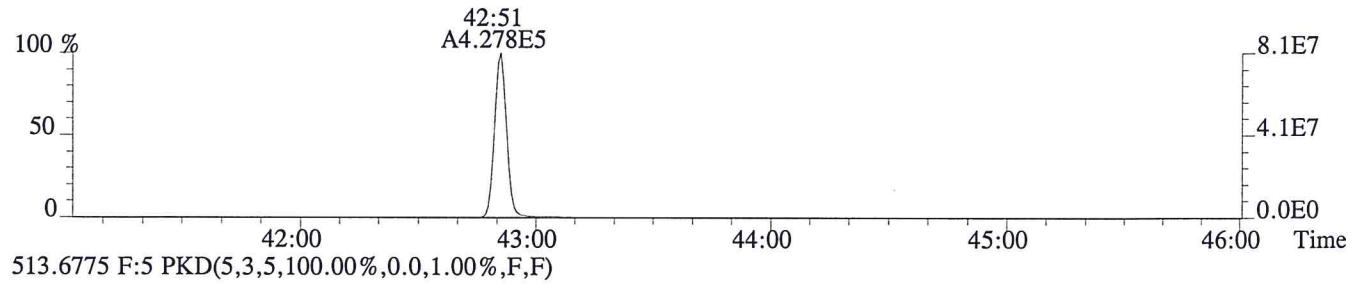
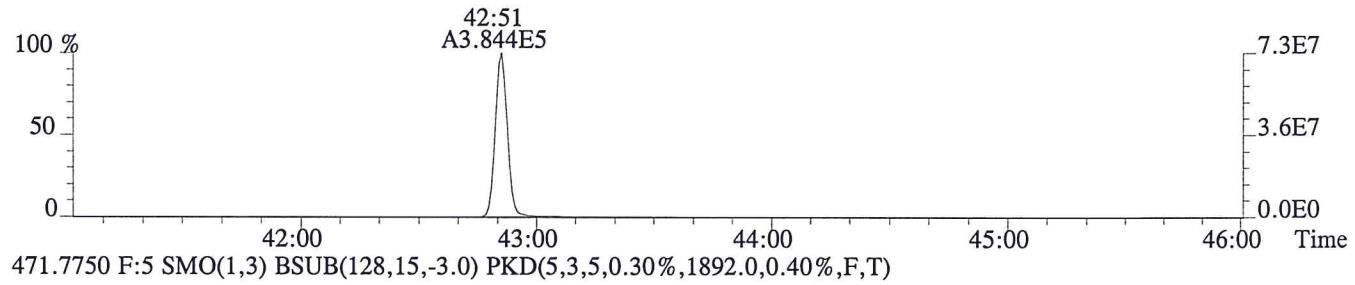
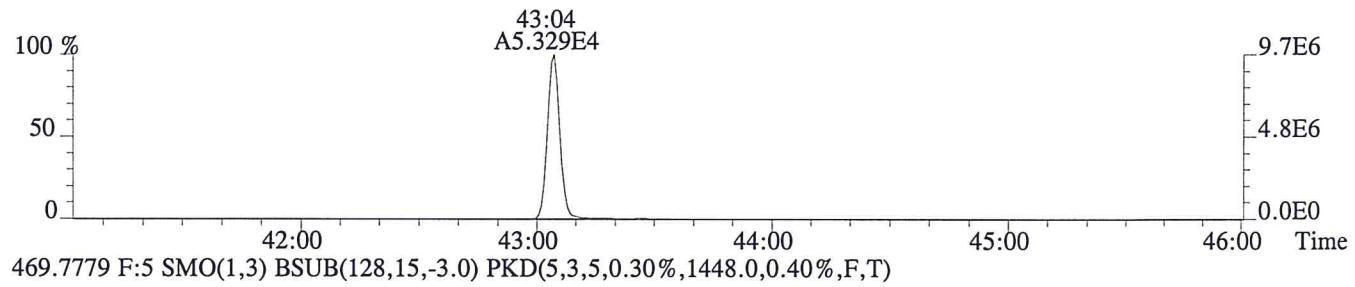
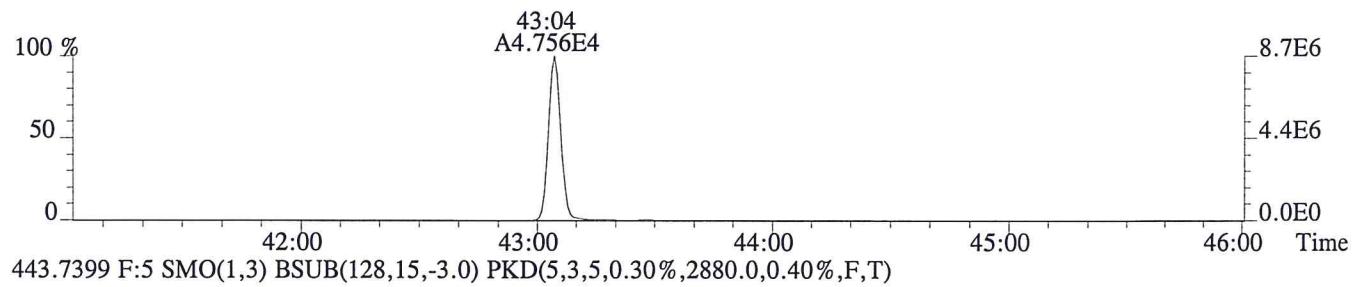
File:P600006 #1-213 Acq:19-AUG-2015 14:09:28 Probe EI+ Magnet SIR VG BioTech Mass spect&  
 Sample#1 Exp:CS2  
 407.7818 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,2304.0,0.50%,F,T)



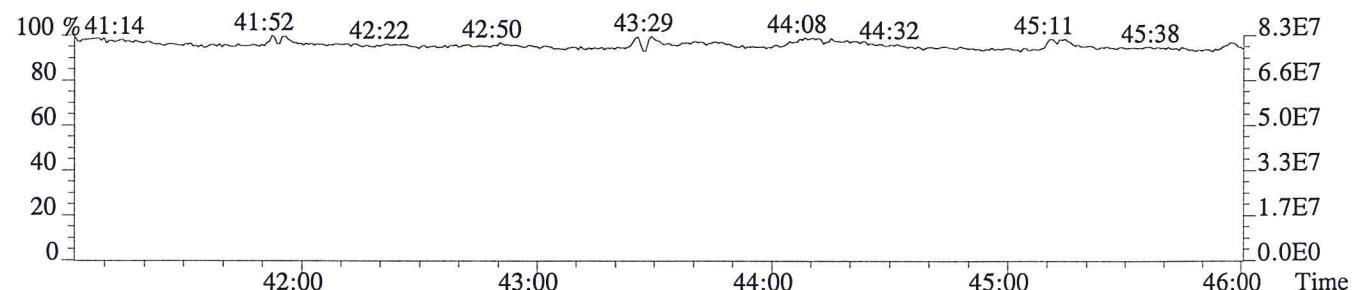
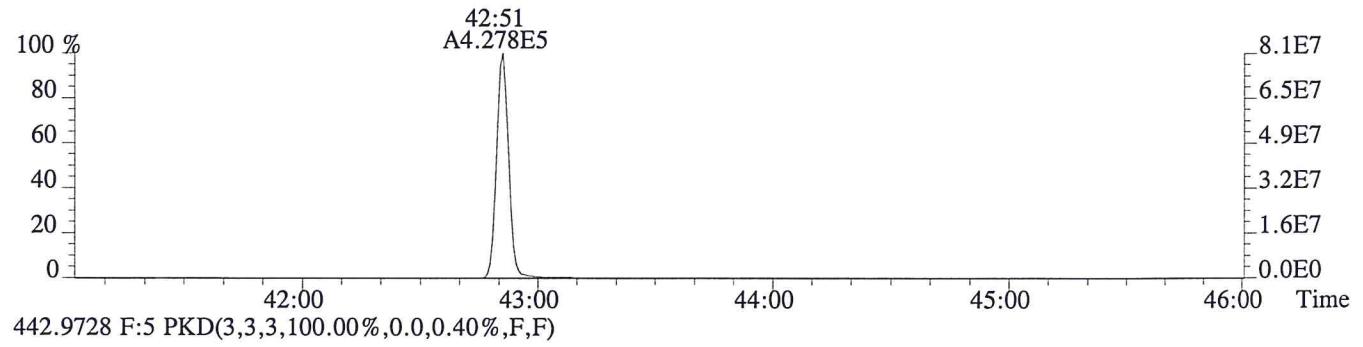
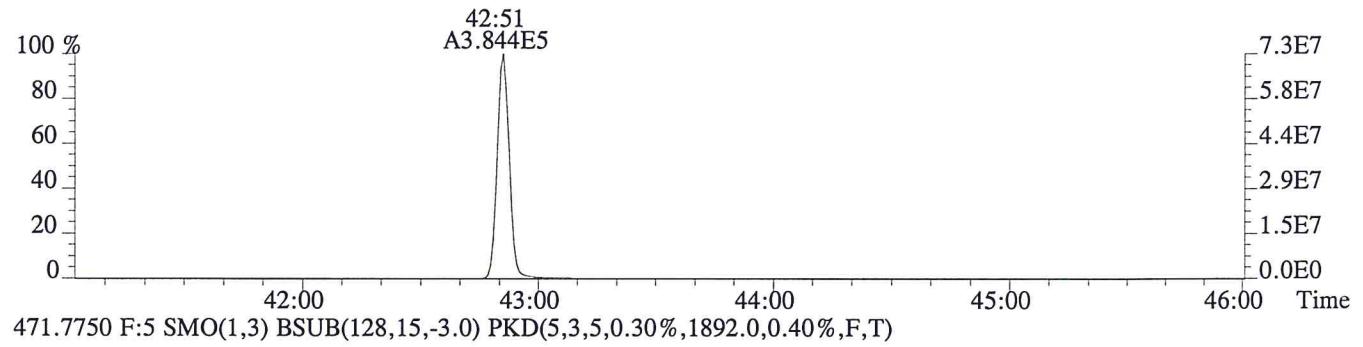
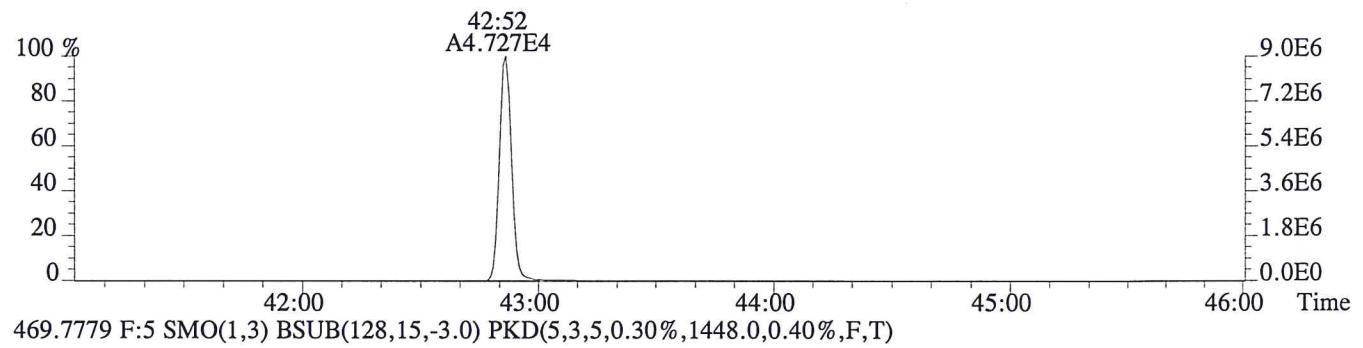
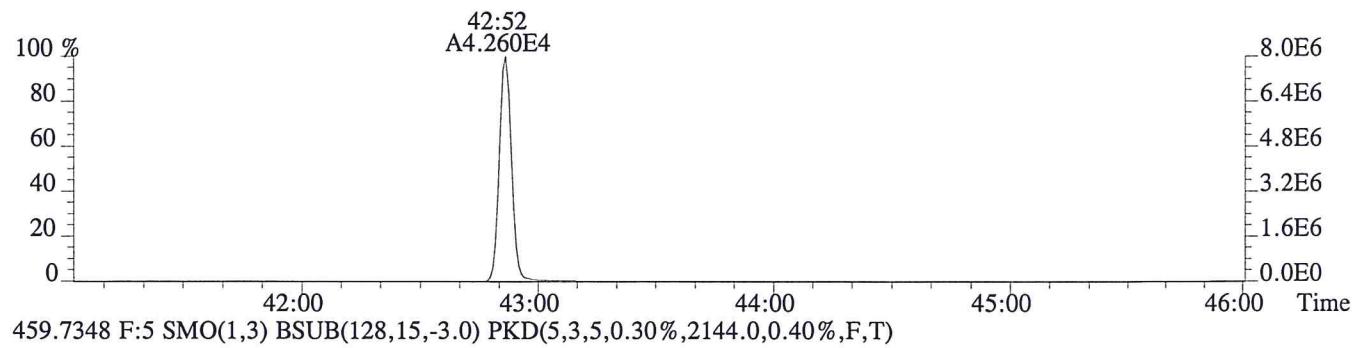
File:P600006 #1-213 Acq:19-AUG-2015 14:09:28 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:CS2  
 423.7766 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1716.0,0.40%,F,T)



File:P600006 #1-448 Acq:19-AUG-2015 14:09:28 Probe EI+ Magnet SIR VG BioTech Mass spect&  
 Sample#1 Exp:CS2  
 441.7428 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1608.0,0.40%,F,T)



File:P600006 #1-448 Acq:19-AUG-2015 14:09:28 Probe EI+ Magnet SIR VG BioTech Mass spectf  
Sample#1 Exp:CS2  
457.7377 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1168.0,0.40%,F,T)



ALS ENVIRONMENTAL  
Sample Response Summary

CLIENT ID.  
76557

Run #4      Filename P600007      Samp: 1      Inj: 1      Acquired: 19-AUG-15 14:58:32  
Processed: 20-AUG-15 08:56:29      Sample ID: CS3

Typ	Name	RT-1	Resp 1	Resp 2	Ratio	Meet	Mod?	RRF	
1	Unk	2,3,7,8-TCDF	29:04	4.407e+04	5.668e+04	0.78	yes	no	0.941
2	Unk	1,2,3,7,8-PeCDF	33:03	3.175e+05	2.047e+05	1.55	yes	no	0.987
3	Unk	2,3,4,7,8-PeCDF	33:55	3.027e+05	1.939e+05	1.56	yes	no	0.934
4	Unk	1,2,3,4,7,8-HxCDF	36:31	2.587e+05	2.127e+05	1.22	yes	no	1.189
5	Unk	1,2,3,6,7,8-HxCDF	36:37	2.739e+05	2.213e+05	1.24	yes	no	1.126
6	Unk	2,3,4,6,7,8-HxCDF	37:06	2.622e+05	2.144e+05	1.22	yes	no	1.116
7	Unk	1,2,3,7,8,9-HxCDF	37:50	2.507e+05	2.019e+05	1.24	yes	no	1.158
8	Unk	1,2,3,4,6,7,8-HpCDF	39:05	2.308e+05	2.261e+05	1.02	yes	no	1.373
9	Unk	1,2,3,4,7,8,9-HpCDF	40:30	2.304e+05	2.259e+05	1.02	yes	no	1.287
10	Unk	OCDF	43:05	2.970e+05	3.304e+05	0.90	yes	no	1.257
11	Unk	2,3,7,8-TCDD	29:48	4.111e+04	5.238e+04	0.78	yes	no	1.010
12	Unk	1,2,3,7,8-PeCDD	34:12	2.193e+05	1.417e+05	1.55	yes	no	0.932
13	Unk	1,2,3,4,7,8-HxCDD	37:14	1.930e+05	1.541e+05	1.25	yes	no	1.026
14	Unk	1,2,3,6,7,8-HxCDD	37:19	1.835e+05	1.464e+05	1.25	yes	no	1.021
15	Unk	1,2,3,7,8,9-HxCDD	37:33	2.122e+05	1.715e+05	1.24	yes	no	1.133
16	Unk	1,2,3,4,6,7,8-HpCDD	40:01	1.822e+05	1.734e+05	1.05	yes	no	1.034
17	Unk	OCDD	42:52	2.569e+05	2.902e+05	0.89	yes	no	1.111
18	IS	13C-2,3,7,8-TCDF	29:03	4.740e+05	6.028e+05	0.79	yes	no	1.379
19	IS	13C-1,2,3,7,8-PeCDF	33:03	6.539e+05	4.153e+05	1.57	yes	no	1.456
20	IS	13C-2,3,4,7,8-PeCDF	33:55	6.503e+05	4.095e+05	1.59	yes	no	1.465
21	IS	13C-1,2,3,4,7,8-HxCDF	36:30	2.717e+05	5.183e+05	0.52	yes	no	1.075
22	IS	13C-1,2,3,6,7,8-HxCDF	36:36	2.988e+05	5.753e+05	0.52	yes	no	1.158
23	IS	13C-2,3,4,6,7,8-HxCDF	37:06	2.937e+05	5.667e+05	0.52	yes	no	1.133
24	IS	13C-1,2,3,7,8,9-HxCDF	37:50	2.685e+05	5.191e+05	0.52	yes	no	1.024
25	IS	13C-1,2,3,4,6,7,8-HpCDF	39:04	2.065e+05	4.673e+05	0.44	yes	no	0.880
26	IS	13C-1,2,3,4,7,8,9-HpCDF	40:29	2.196e+05	4.943e+05	0.44	yes	no	0.914
27	IS	13C-2,3,7,8-TCDD	29:48	4.102e+05	5.235e+05	0.78	yes	no	1.193
28	IS	13C-1,2,3,7,8-PeCDD	34:11	4.759e+05	3.025e+05	1.57	yes	no	1.094
29	IS	13C-1,2,3,4,7,8-HxCDD	37:13	3.801e+05	3.019e+05	1.26	yes	no	0.906
30	IS	13C-1,2,3,6,7,8-HxCDD	37:18	3.596e+05	2.838e+05	1.27	yes	no	0.860
31	IS	13C-1,2,3,4,6,7,8-HpCDD	40:00	3.565e+05	3.383e+05	1.05	yes	no	0.892
32	IS	13C-OCDD	42:51	4.715e+05	5.243e+05	0.90	yes	no	0.642
33	RS/RT	13C-1,2,3,4-TCDD	29:15	3.435e+05	4.336e+05	0.79	yes	no	-
34	RS/RT	13C-1,2,3,7,8,9-HxCDD	37:32	4.300e+05	3.424e+05	1.26	yes	no	-
35	C/Up	37Cl-2,3,7,8-TCDD	29:48	9.764e+04				no	1.263

---

ALS ENVIRONMENTAL  
10450 Stancliff Rd, Suite 115  
Houston, TX 77099  
Office (713) 266-1599. Fax (713) 266-0130

[www.alsglobal.com](http://www.alsglobal.com)

ALS ENVIRONMENTAL  
Signal/Noise Height Ratio Summary

CLIENT ID.  
76557

Run #4   Filename P600007               Samp: 1   Inj: 1           Acquired: 19-AUG-15 14:58:32  
Processed: 20-AUG-15 08:56:29           LAB. ID: CS3

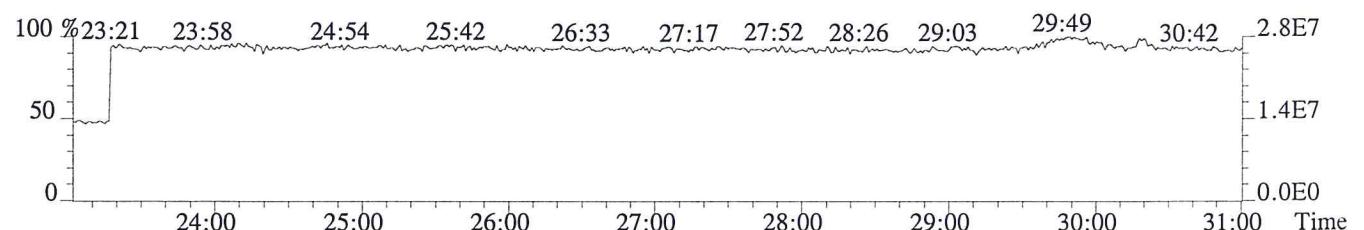
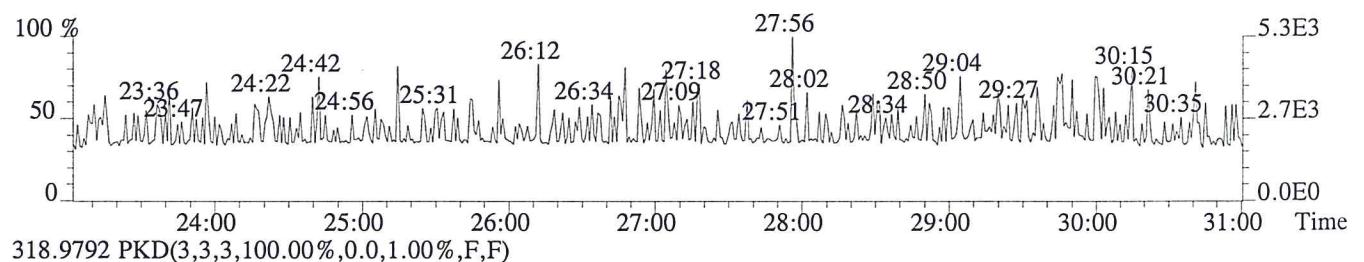
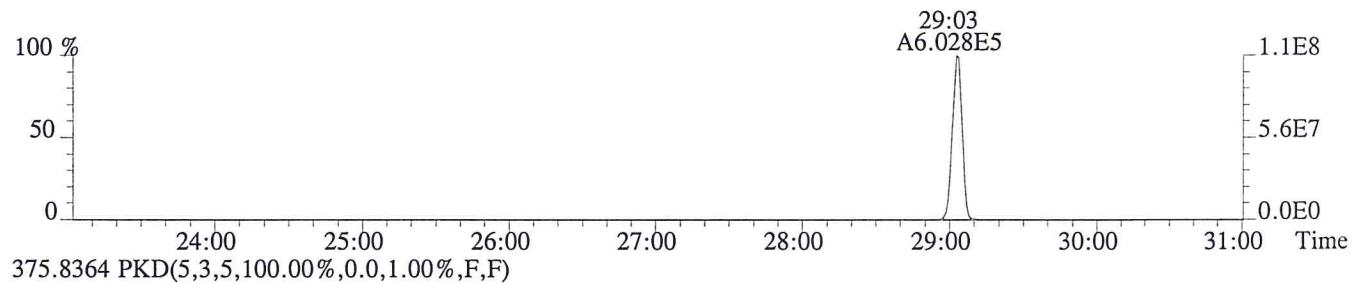
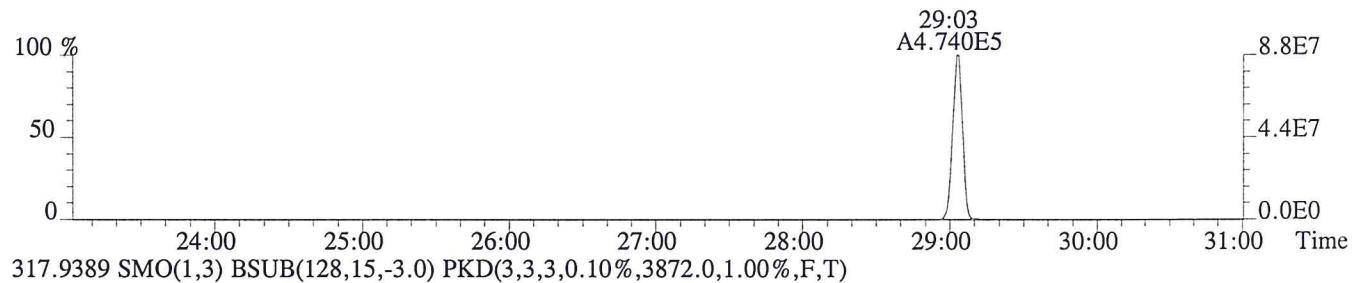
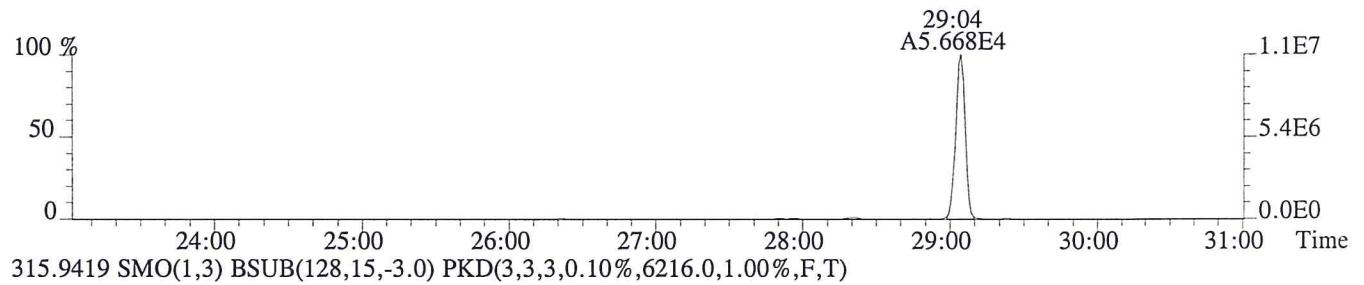
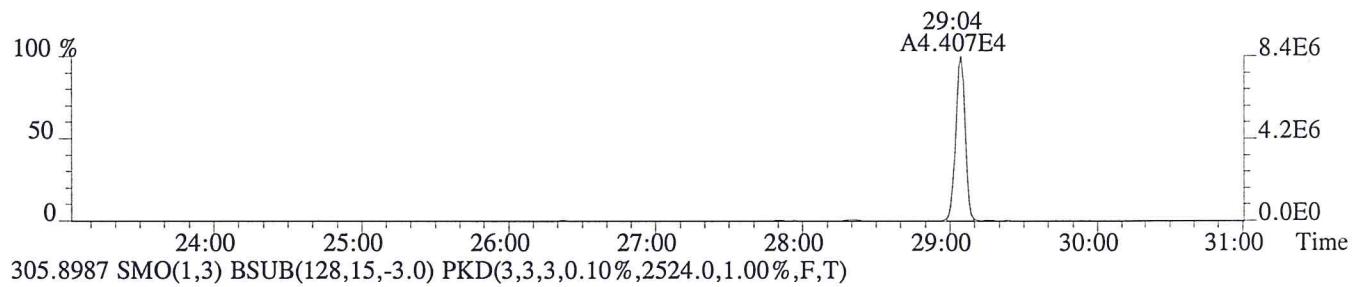
	Name	Signal 1	Noise 1	S/N Rat.1	Signal 2	Noise 2	S/N Rat.2
--	------	----------	---------	-----------	----------	---------	-----------

1	2,3,7,8-TCDF	8.44e+06	1.93e+03	4.4e+03	1.08e+07	2.52e+03	4.3e+03
2	1,2,3,7,8-PeCDF	6.21e+07	1.64e+03	3.8e+04	3.99e+07	4.21e+03	9.5e+03
3	2,3,4,7,8-PeCDF	6.23e+07	1.64e+03	3.8e+04	4.00e+07	4.21e+03	9.5e+03
4	1,2,3,4,7,8-HxCDF	5.65e+07	2.31e+03	2.4e+04	4.59e+07	2.90e+03	1.6e+04
5	1,2,3,6,7,8-HxCDF	5.83e+07	2.31e+03	2.5e+04	4.70e+07	2.90e+03	1.6e+04
6	2,3,4,6,7,8-HxCDF	5.71e+07	2.31e+03	2.5e+04	4.65e+07	2.90e+03	1.6e+04
7	1,2,3,7,8,9-HxCDF	5.42e+07	2.31e+03	2.3e+04	4.36e+07	2.90e+03	1.5e+04
8	1,2,3,4,6,7,8-HpCDF	4.99e+07	1.17e+04	4.3e+03	4.83e+07	5.15e+03	9.4e+03
9	1,2,3,4,7,8,9-HpCDF	4.73e+07	1.17e+04	4.0e+03	4.65e+07	5.15e+03	9.0e+03
10	OCDF	5.30e+07	1.30e+03	4.1e+04	5.85e+07	2.57e+03	2.3e+04
11	2,3,7,8-TCDD	8.34e+06	1.86e+03	4.5e+03	1.06e+07	2.33e+03	4.6e+03
12	1,2,3,7,8-PeCDD	4.51e+07	3.20e+03	1.4e+04	2.93e+07	2.36e+03	1.2e+04
13	1,2,3,4,7,8-HxCDD	4.40e+07	1.47e+03	3.0e+04	3.52e+07	1.56e+03	2.3e+04
14	1,2,3,6,7,8-HxCDD	4.04e+07	1.47e+03	2.7e+04	3.21e+07	1.56e+03	2.1e+04
15	1,2,3,7,8,9-HxCDD	4.66e+07	1.47e+03	3.2e+04	3.72e+07	1.56e+03	2.4e+04
16	1,2,3,4,6,7,8-HpCDD	3.84e+07	1.02e+03	3.8e+04	3.62e+07	9.08e+02	4.0e+04
17	OCDD	4.66e+07	9.64e+02	4.8e+04	5.29e+07	1.77e+03	3.0e+04
18	13C-2,3,7,8-TCDF	8.78e+07	6.22e+03	1.4e+04	1.12e+08	3.87e+03	2.9e+04
19	13C-1,2,3,7,8-PeCDF	1.27e+08	1.82e+03	7.0e+04	8.04e+07	2.30e+03	3.5e+04
20	13C-2,3,4,7,8-PeCDF	1.33e+08	1.82e+03	7.3e+04	8.37e+07	2.30e+03	3.6e+04
21	13C-1,2,3,4,7,8-HxCDF	5.91e+07	2.01e+03	2.9e+04	1.12e+08	3.86e+03	2.9e+04
22	13C-1,2,3,6,7,8-HxCDF	6.38e+07	2.01e+03	3.2e+04	1.24e+08	3.86e+03	3.2e+04
23	13C-2,3,4,6,7,8-HxCDF	6.39e+07	2.01e+03	3.2e+04	1.23e+08	3.86e+03	3.2e+04
24	13C-1,2,3,7,8,9-HxCDF	5.80e+07	2.01e+03	2.9e+04	1.13e+08	3.86e+03	2.9e+04
25	13C-1,2,3,4,6,7,8-HpCDF	4.46e+07	1.07e+04	4.2e+03	1.00e+08	1.12e+04	9.0e+03
26	13C-1,2,3,4,7,8,9-HpCDF	4.45e+07	1.07e+04	4.1e+03	1.01e+08	1.12e+04	9.0e+03
27	13C-2,3,7,8-TCDD	8.22e+07	1.09e+04	7.5e+03	1.05e+08	5.44e+03	1.9e+04
28	13C-1,2,3,7,8-PeCDD	9.47e+07	1.79e+03	5.3e+04	6.09e+07	1.44e+03	4.2e+04
29	13C-1,2,3,4,7,8-HxCDD	8.65e+07	5.96e+03	1.5e+04	6.88e+07	3.70e+03	1.9e+04
30	13C-1,2,3,6,7,8-HxCDD	7.96e+07	5.96e+03	1.3e+04	6.27e+07	3.70e+03	1.7e+04
31	13C-1,2,3,4,6,7,8-HpCDD	7.40e+07	2.78e+03	2.7e+04	6.99e+07	1.59e+03	4.4e+04
32	13C-OCDD	8.49e+07	1.58e+03	5.4e+04	9.49e+07	1.54e+03	6.2e+04
33	13C-1,2,3,4-TCDD	6.58e+07	1.09e+04	6.0e+03	8.38e+07	5.44e+03	1.5e+04
34	13C-1,2,3,7,8,9-HxCDD	9.48e+07	5.96e+03	1.6e+04	7.46e+07	3.70e+03	2.0e+04
35	37Cl-2,3,7,8-TCDD	1.99e+07	2.81e+03	7.1e+03			

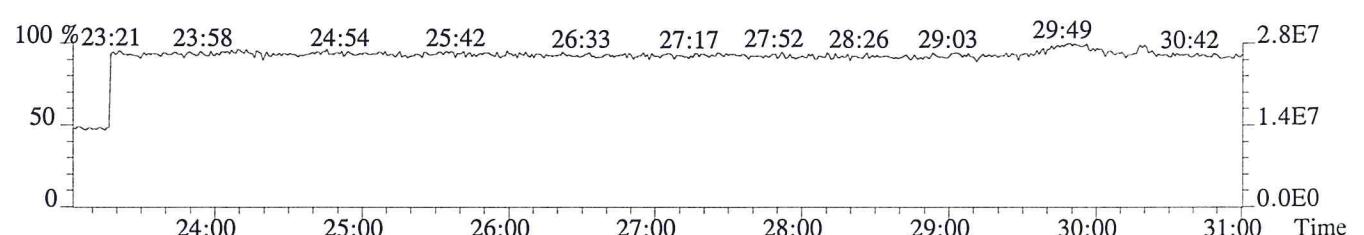
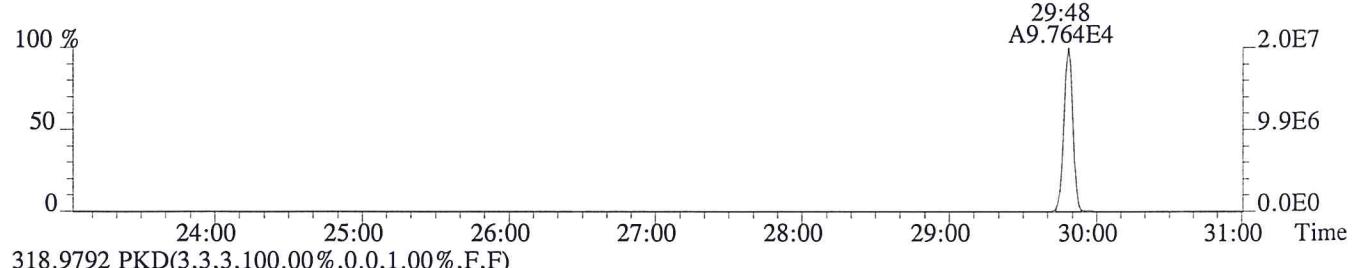
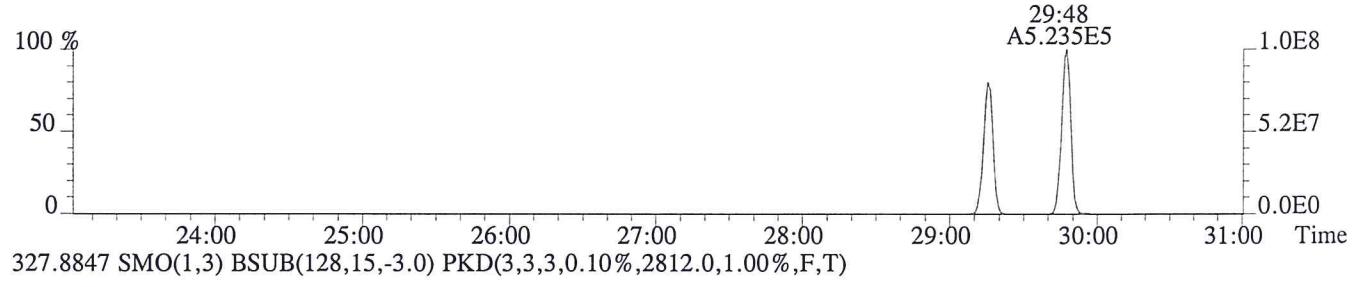
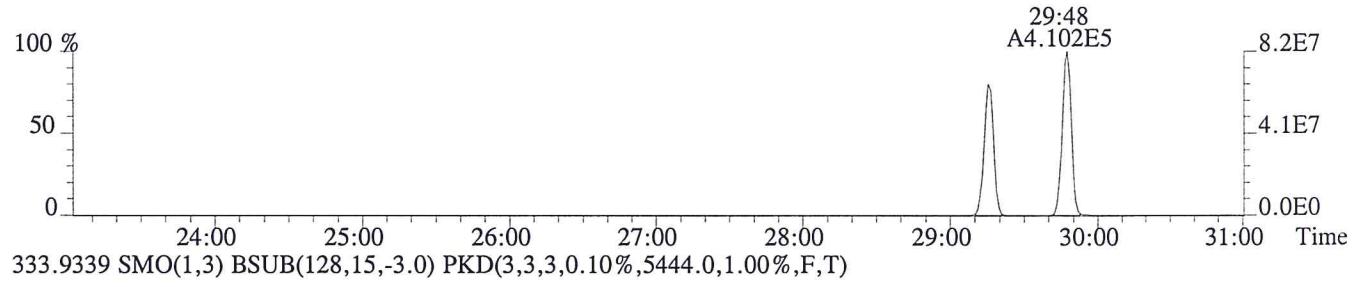
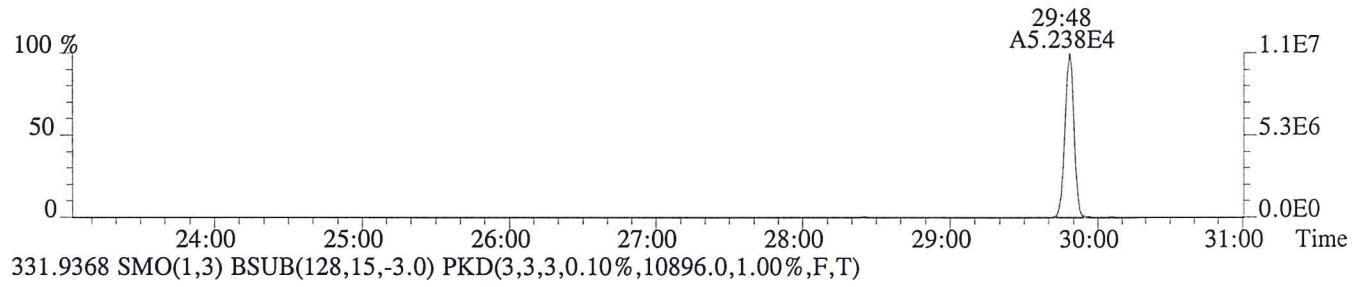
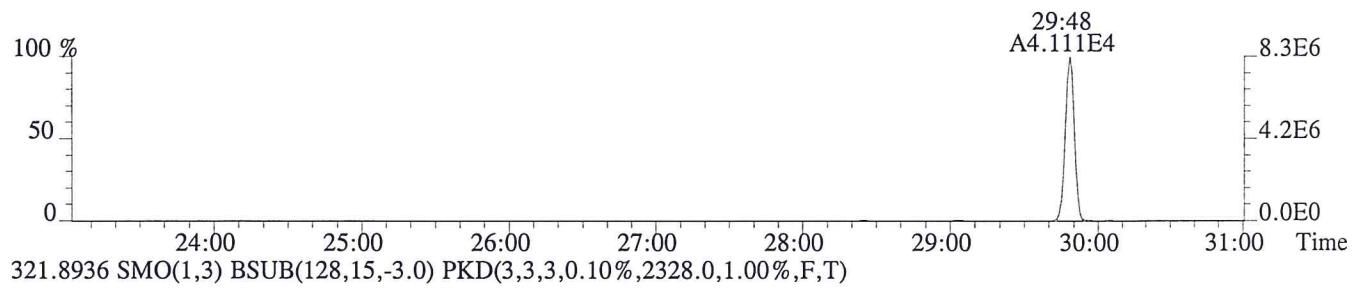
---

ALS ENVIRONMENTAL  
10450 Stancliff Rd., Suite 115  
Houston, TX 77099  
Office: (713) 266-1599. Fax: (713) 266-0130

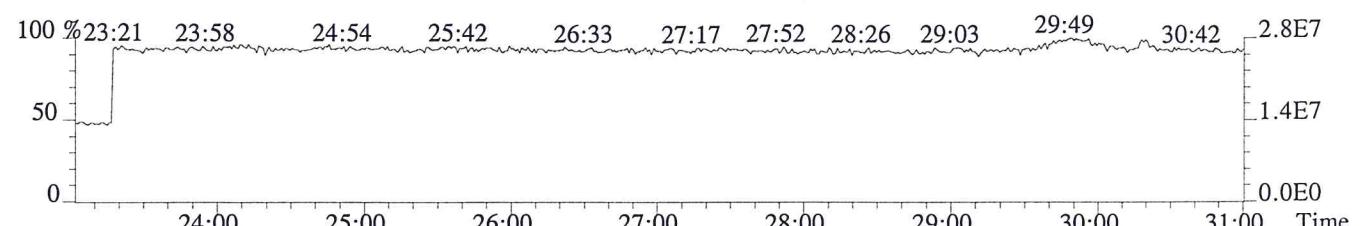
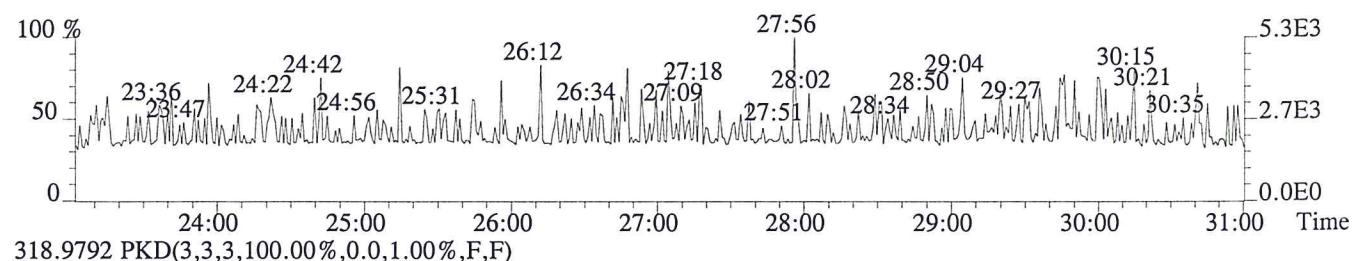
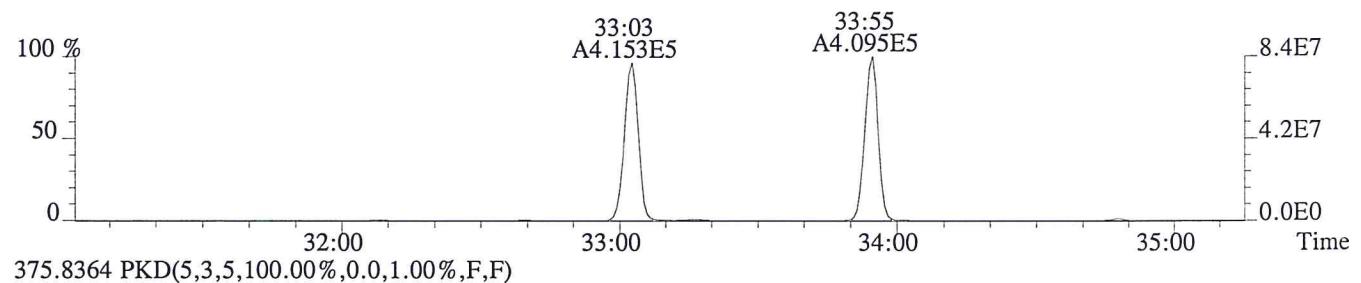
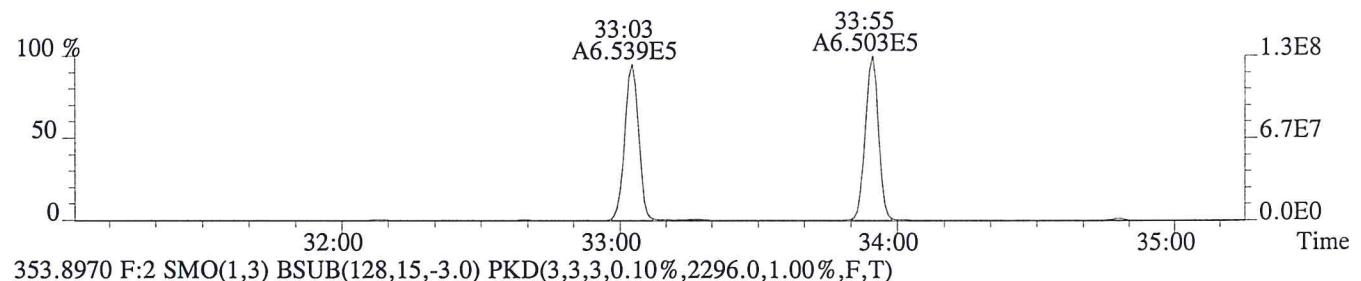
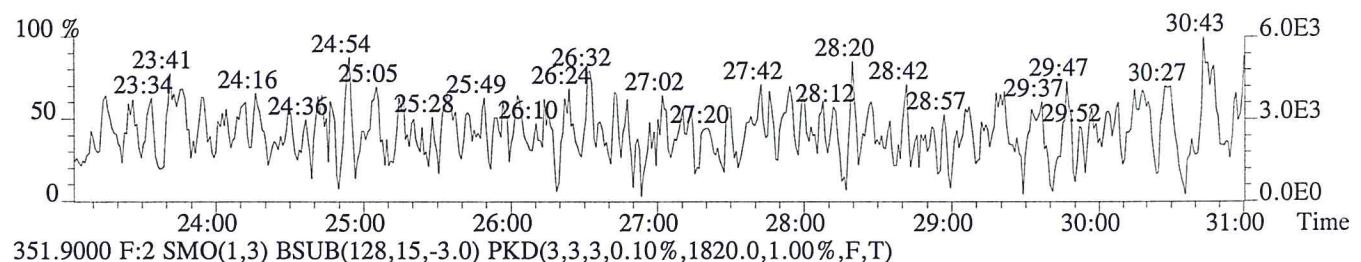
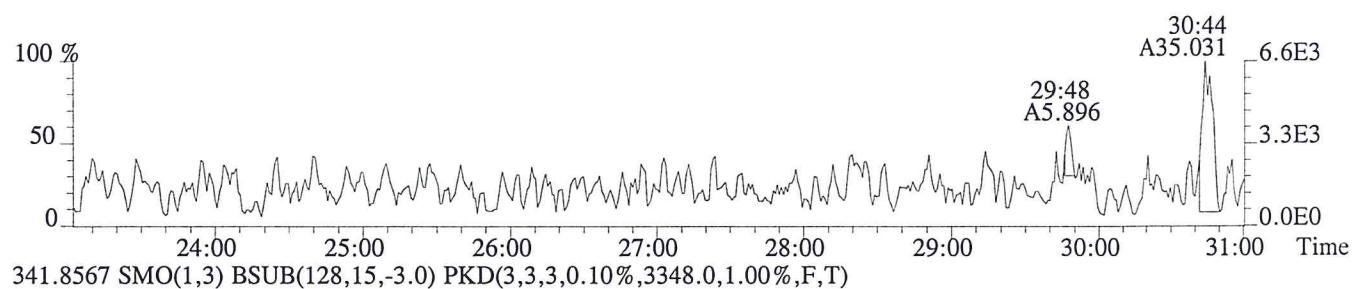
File:P600007 #1-566 Acq:19-AUG-2015 14:58:32 Probe EI+ Magnet SIR VG BioTech Mass spect&  
 Sample#1 Exp:CS3  
 303.9016 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1932.0,1.00%,F,T)



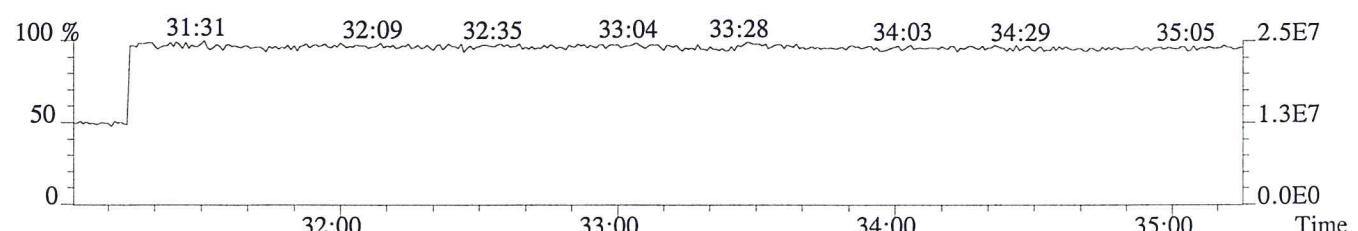
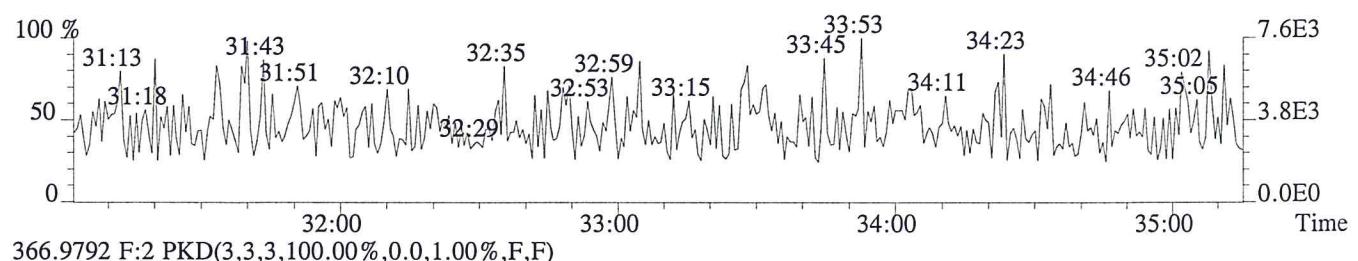
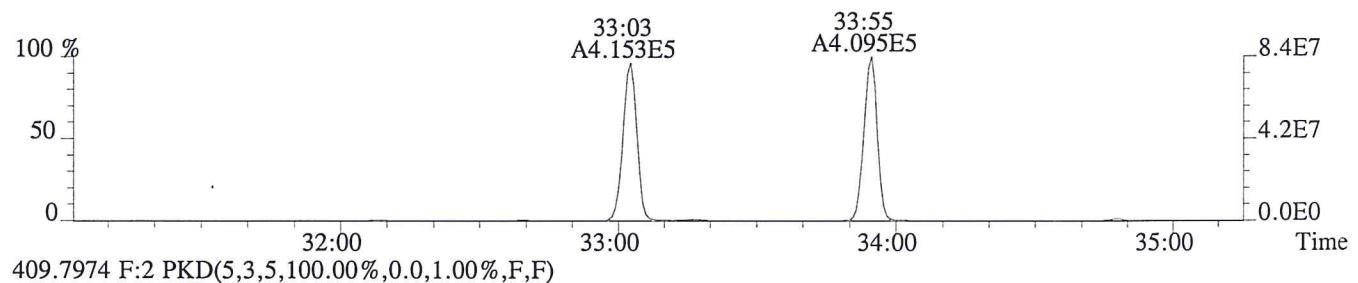
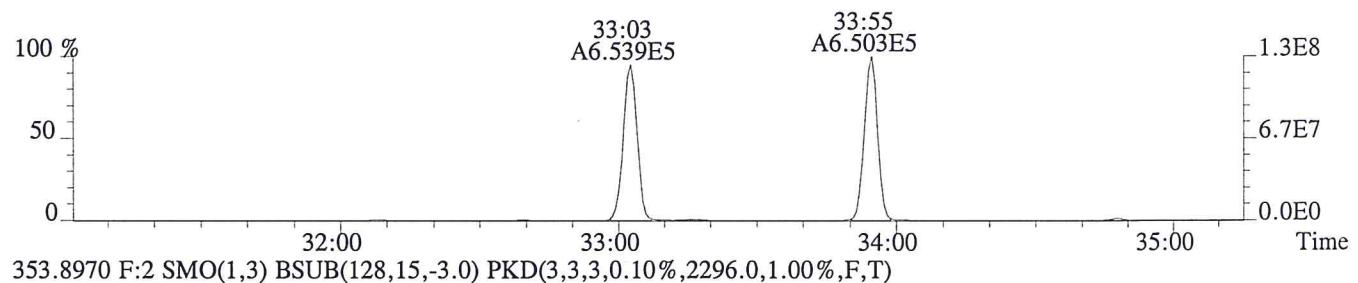
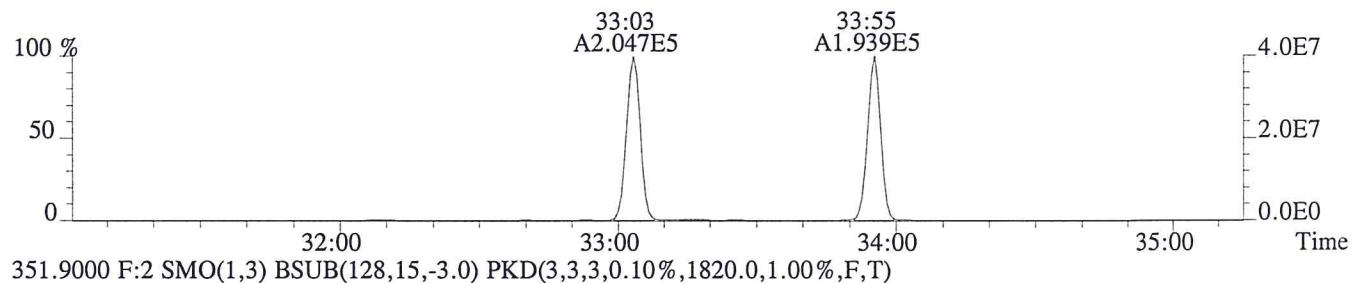
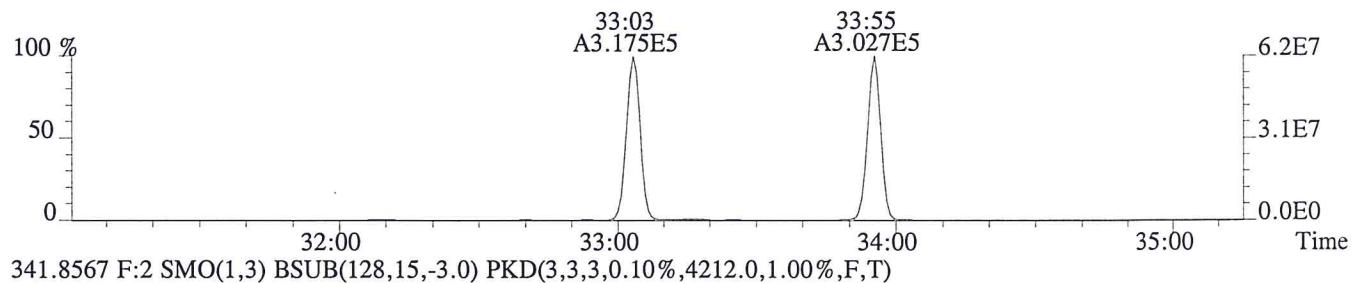
File:P600007 #1-566 Acq:19-AUG-2015 14:58:32 Probe EI+ Magnet SIR VG BioTech Mass spect&  
 Sample#1 Exp:CS3  
 319.8965 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1864.0,1.00%,F,T)



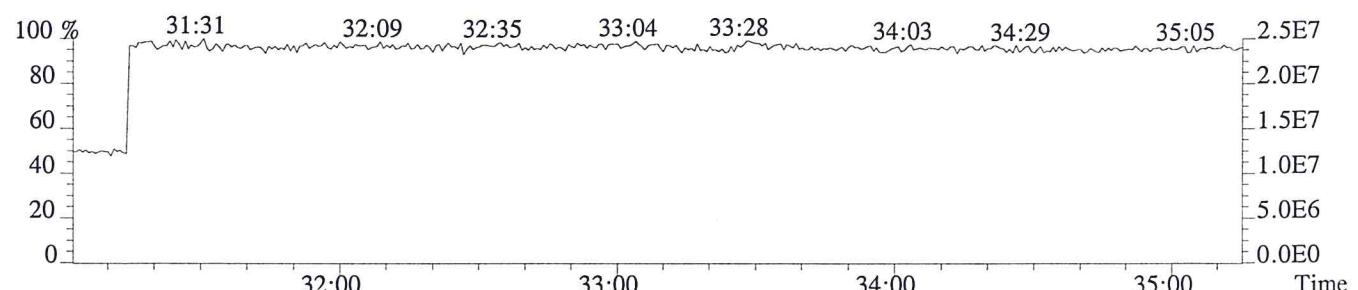
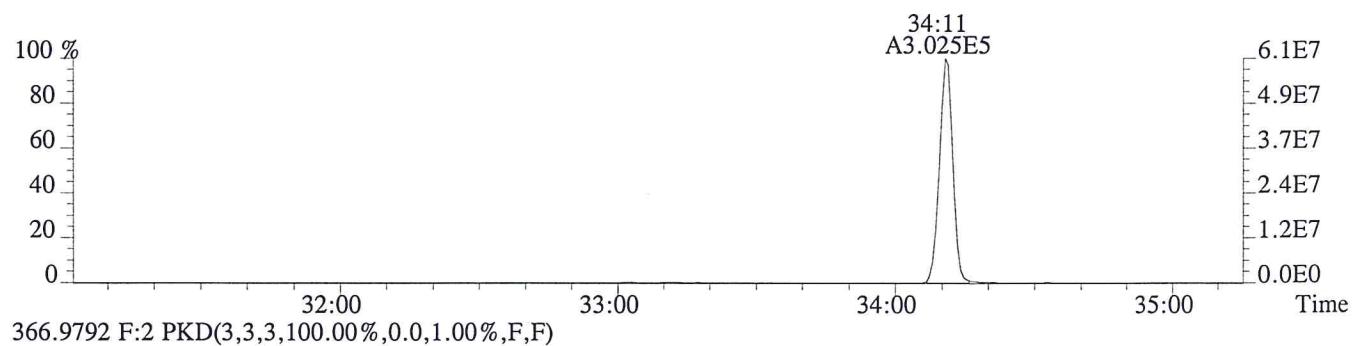
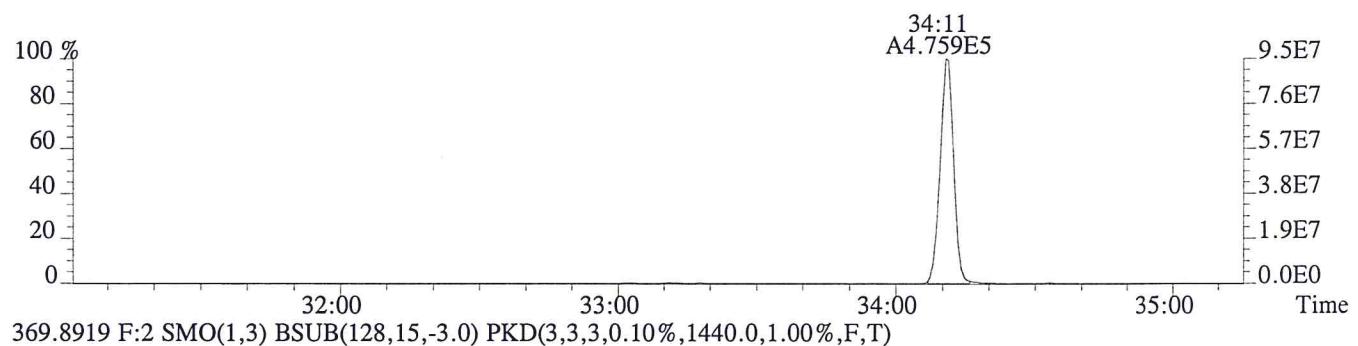
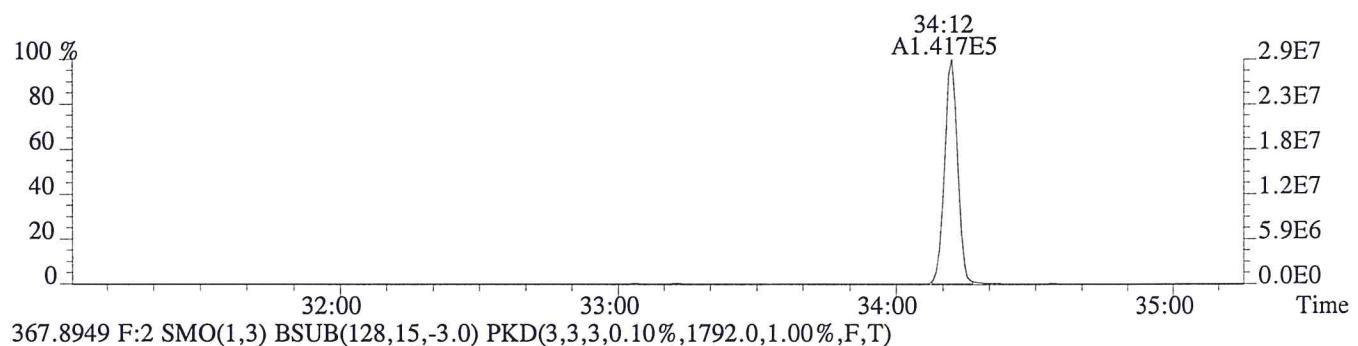
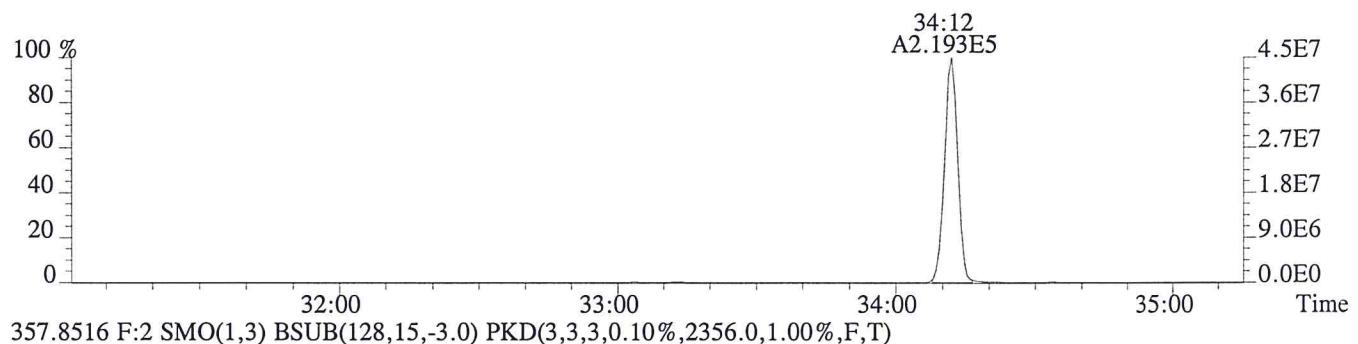
File:P600007 #1-566 Acq:19-AUG-2015 14:58:32 Probe EI+ Magnet SIR VG BioTech Mass spect&  
 Sample#1 Exp:CS3  
 339.8597 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1760.0,1.00%,F,T)



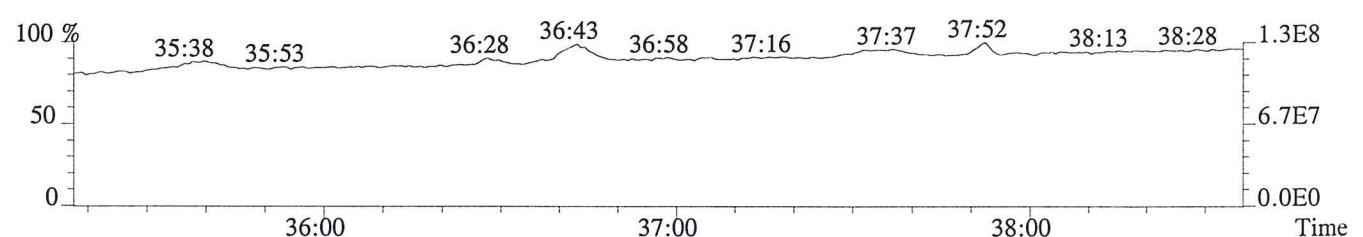
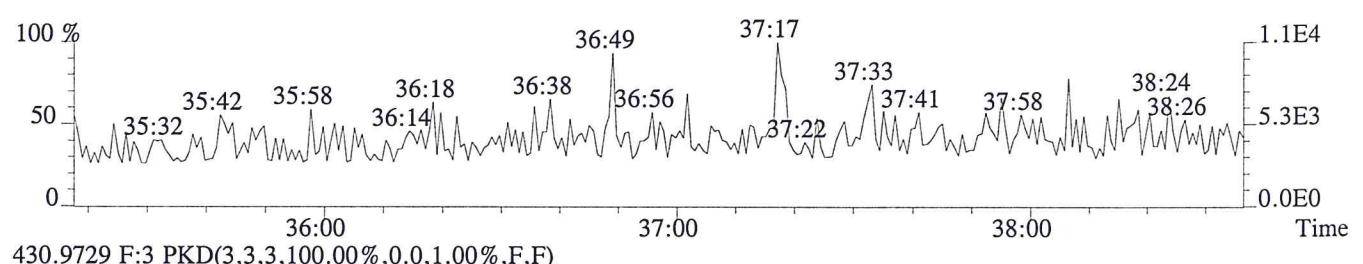
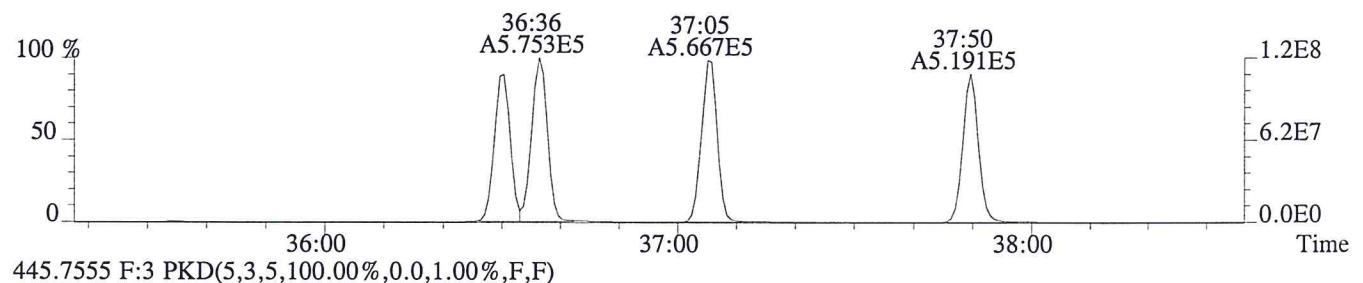
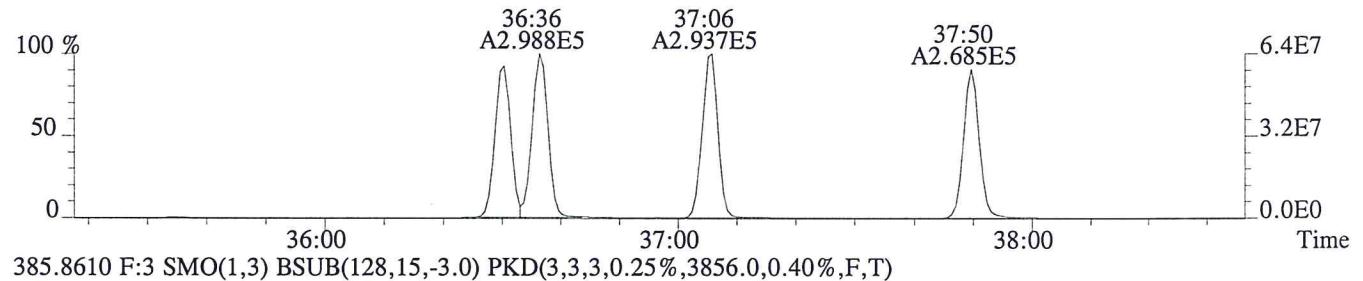
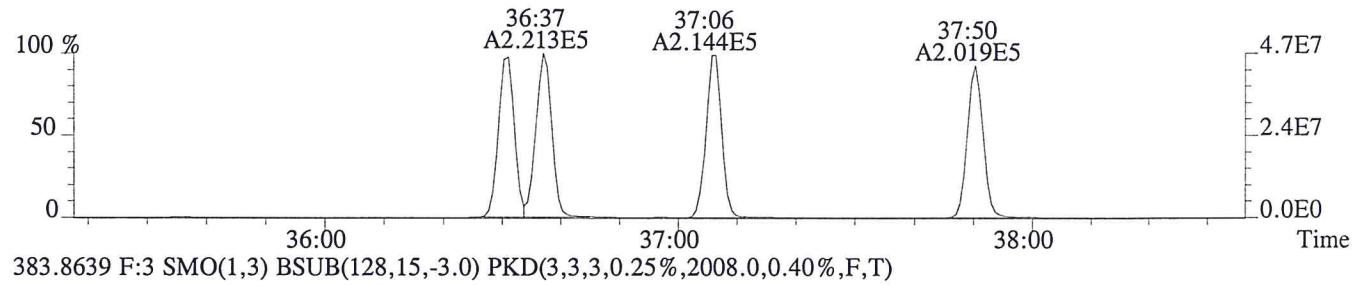
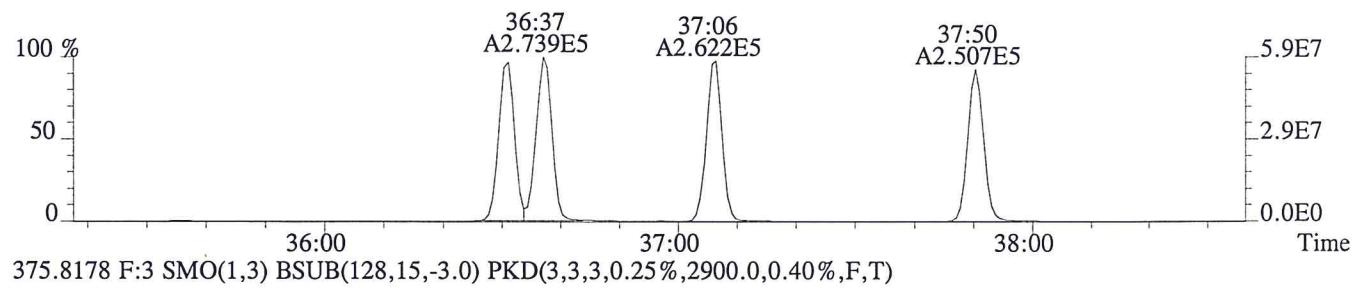
File:P600007 #1-380 Acq:19-AUG-2015 14:58:32 Probe EI+ Magnet SIR VG BioTech Mass spect&  
 Sample#1 Exp:CS3  
 339.8597 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1636.0,1.00%,F,T)



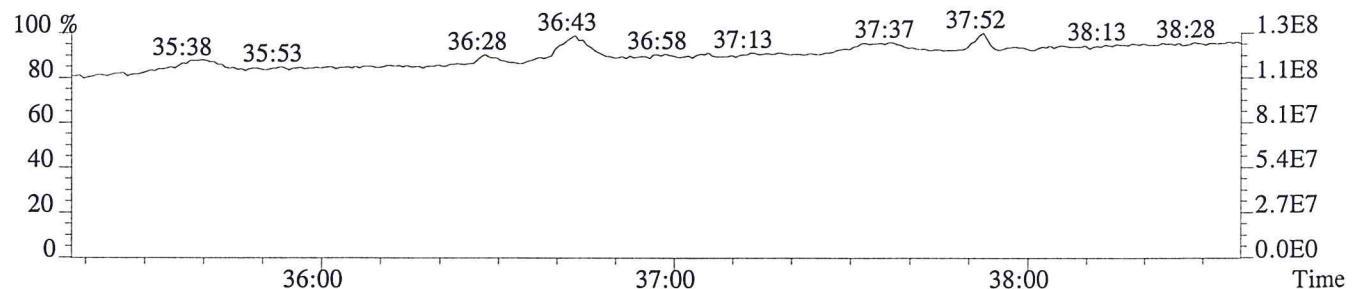
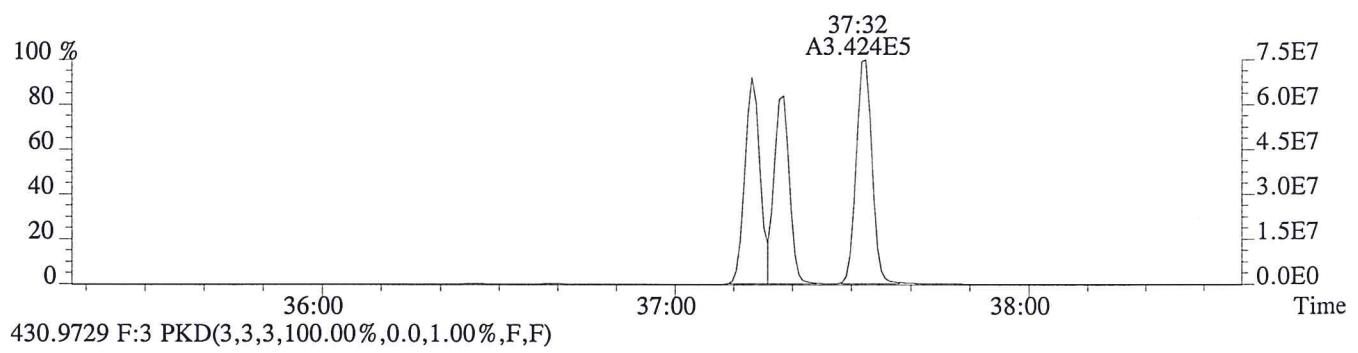
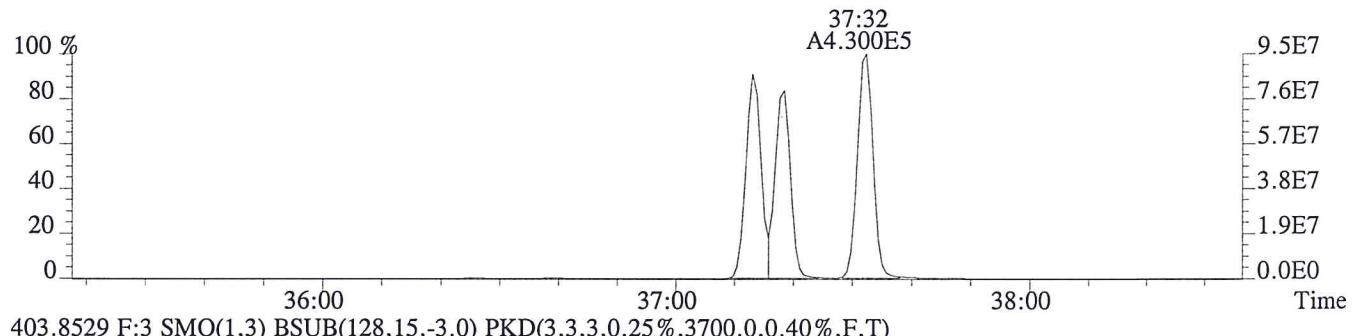
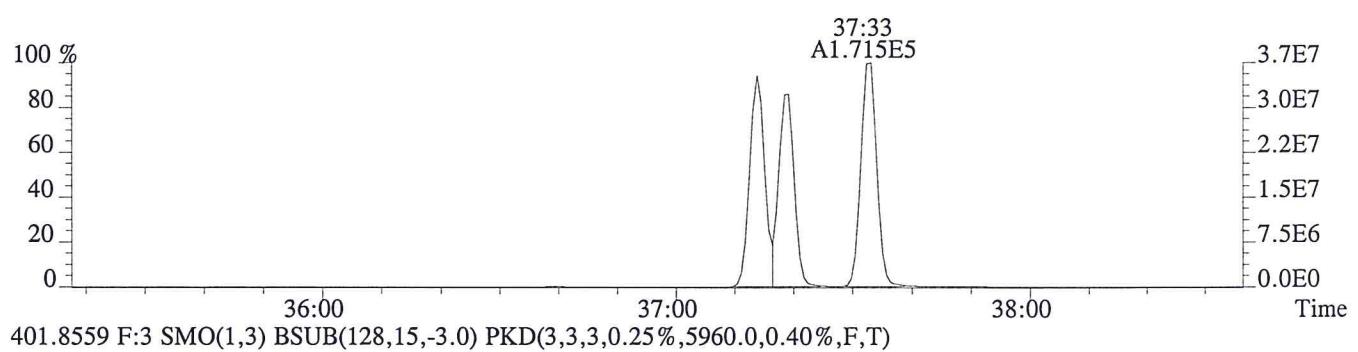
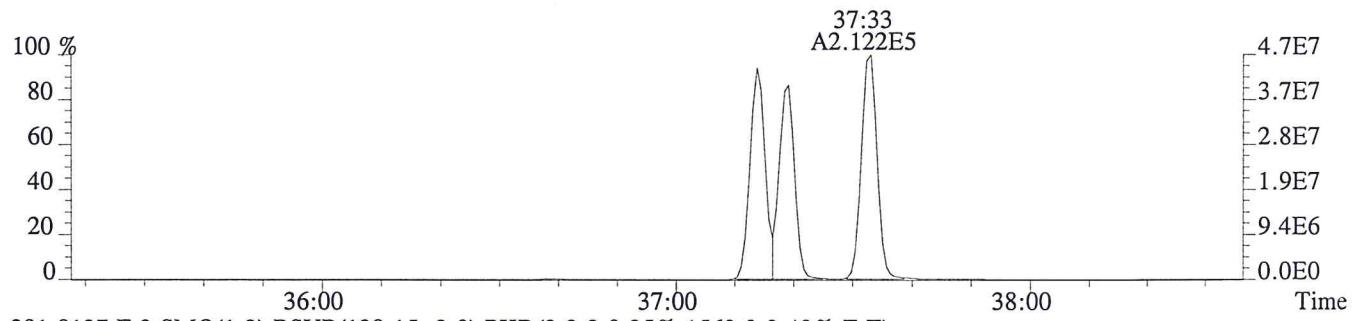
File:P600007 #1-380 Acq:19-AUG-2015 14:58:32 Probe EI+ Magnet SIR VG BioTech Mass spect&  
Sample#1 Exp:CS3  
355.8546 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,3196.0,1.00%,F,T)



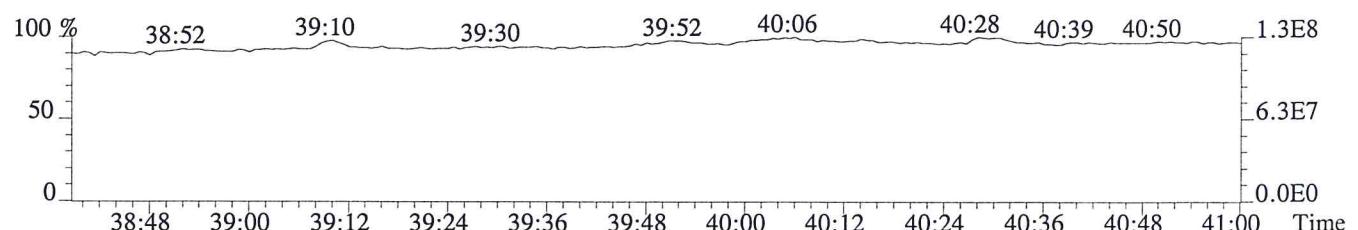
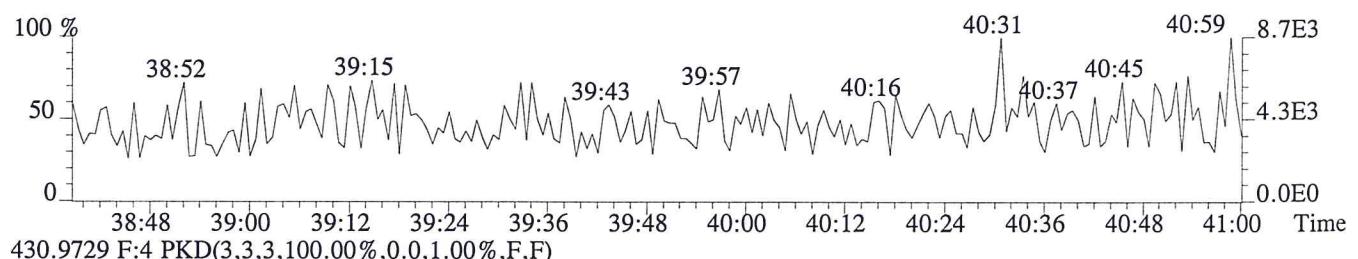
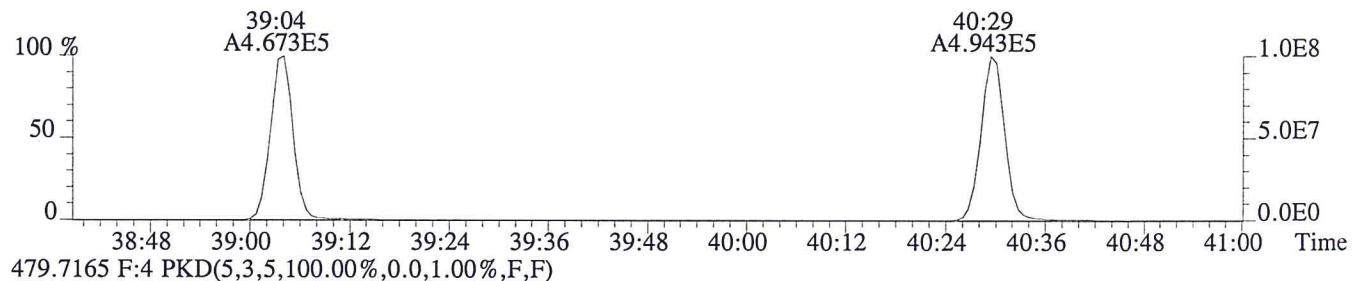
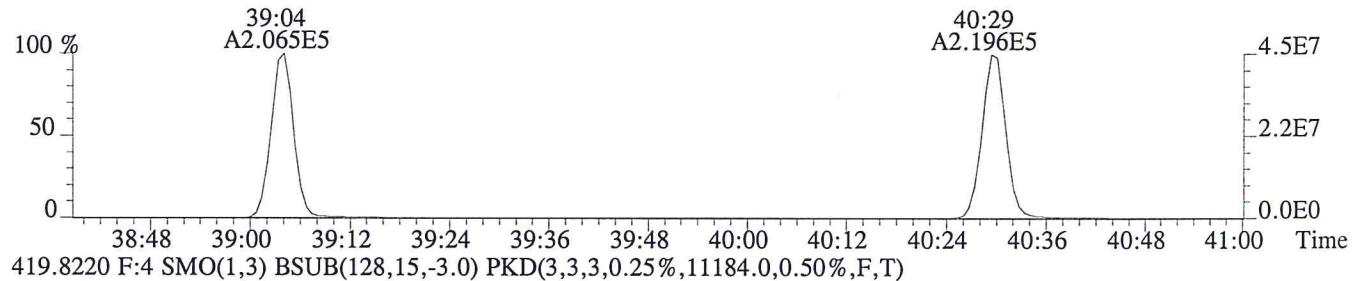
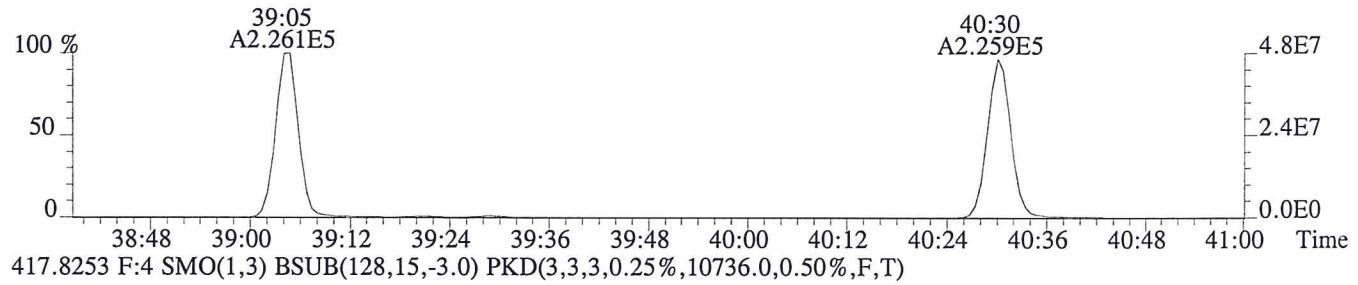
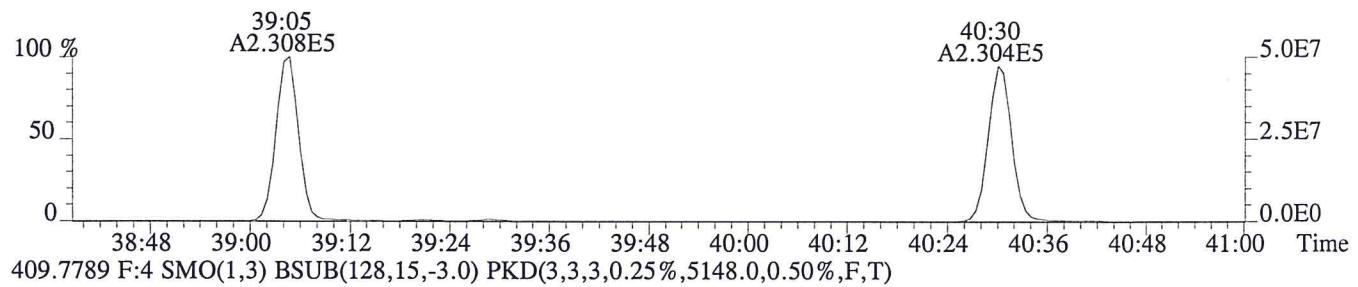
File:P600007 #1-299 Acq:19-AUG-2015 14:58:32 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:CS3  
 373.8208 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,2312.0,0.40%,F,T)



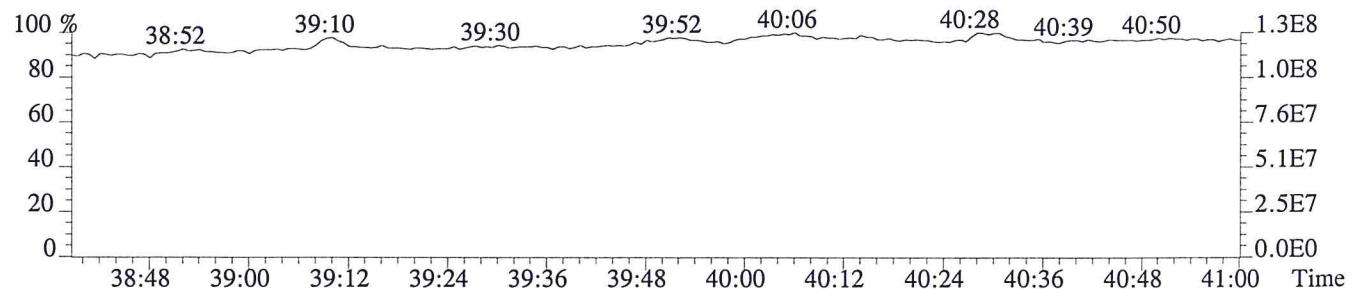
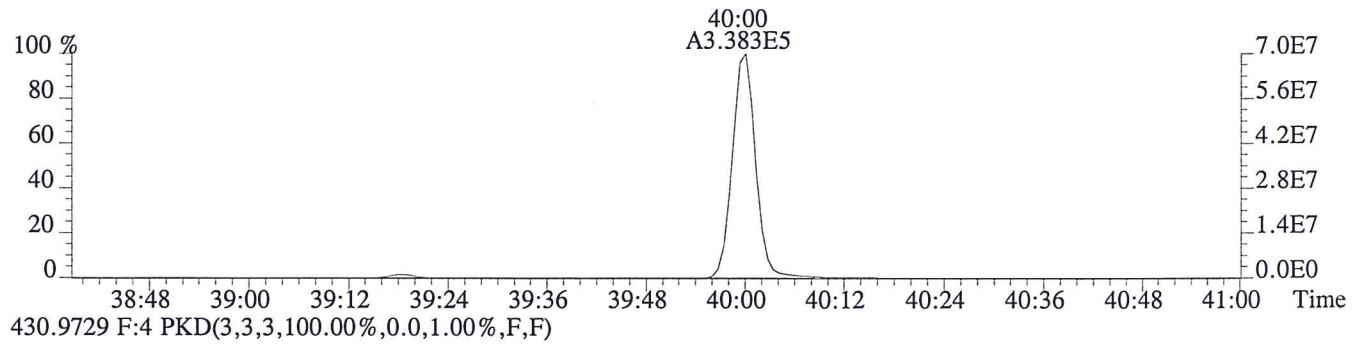
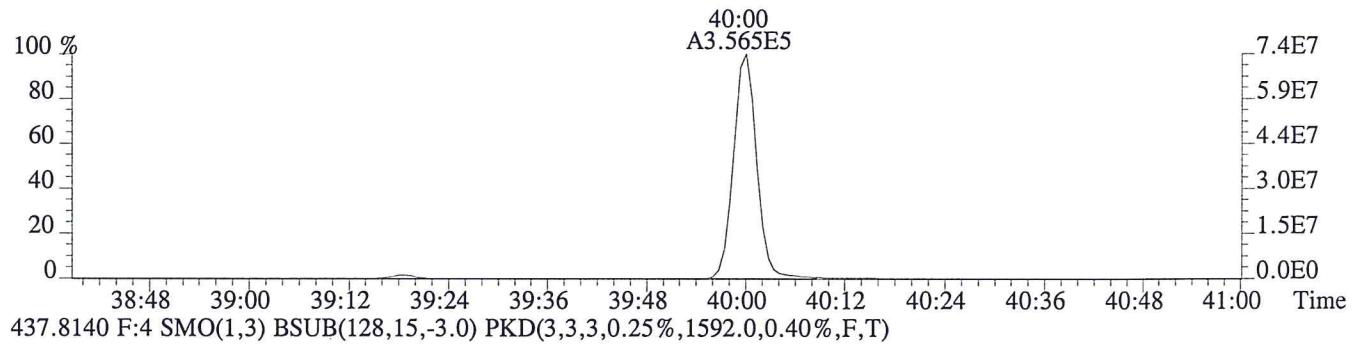
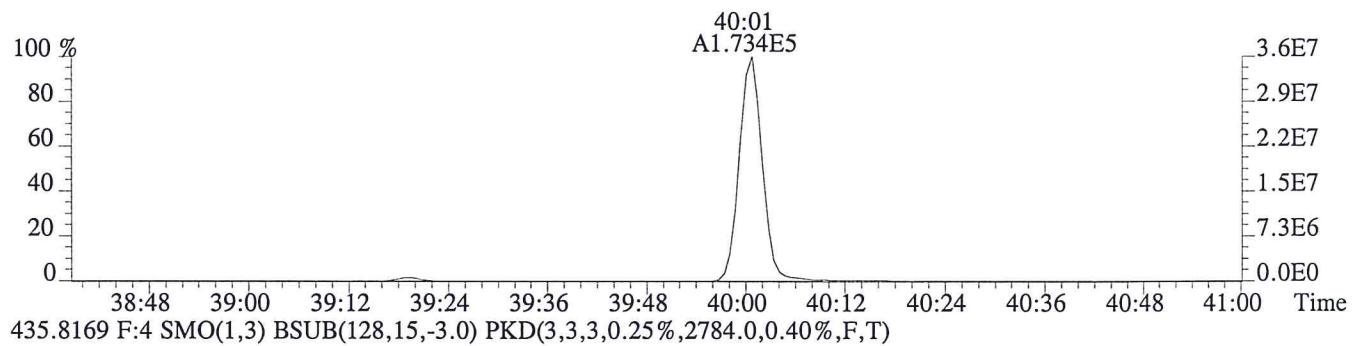
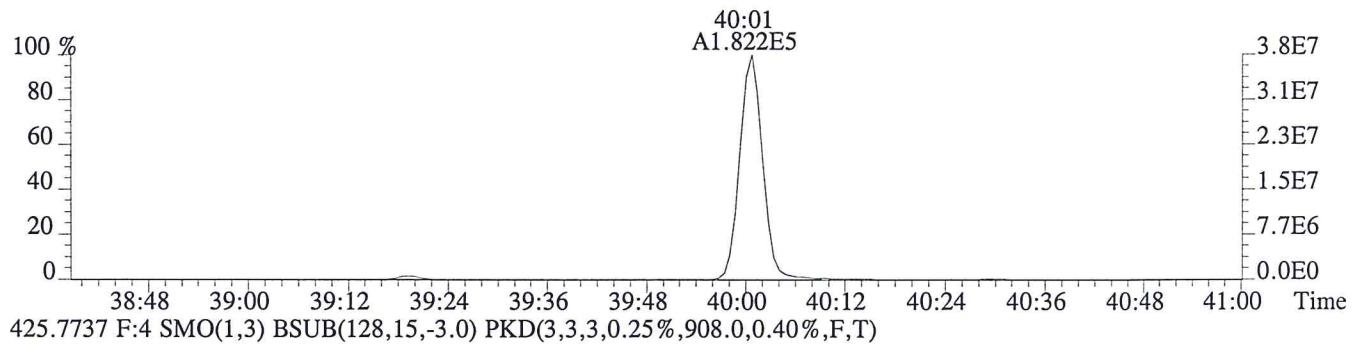
File:P600007 #1-299 Acq:19-AUG-2015 14:58:32 Probe EI+ Magnet SIR VG BioTech Mass spect&  
 Sample#1 Exp:CS3  
 389.8157 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1472.0,0.40%,F,T)



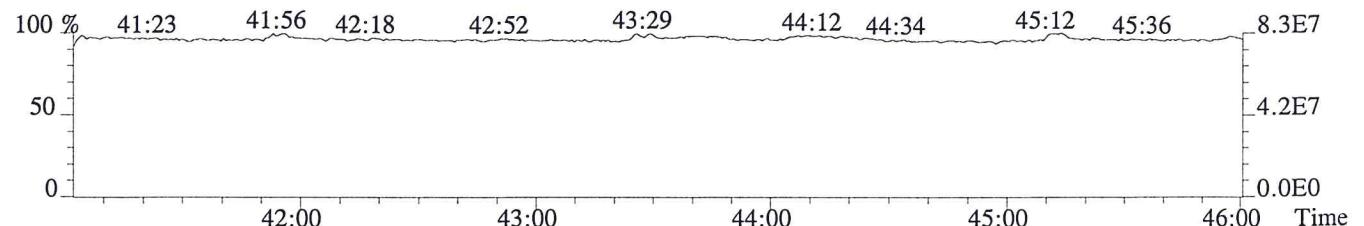
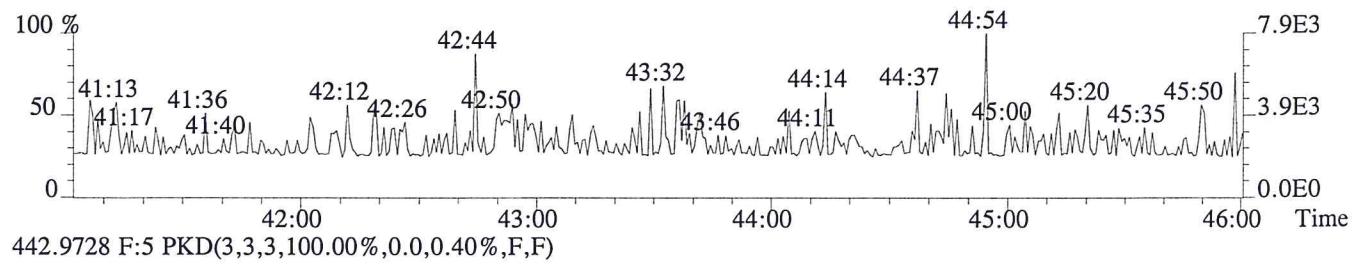
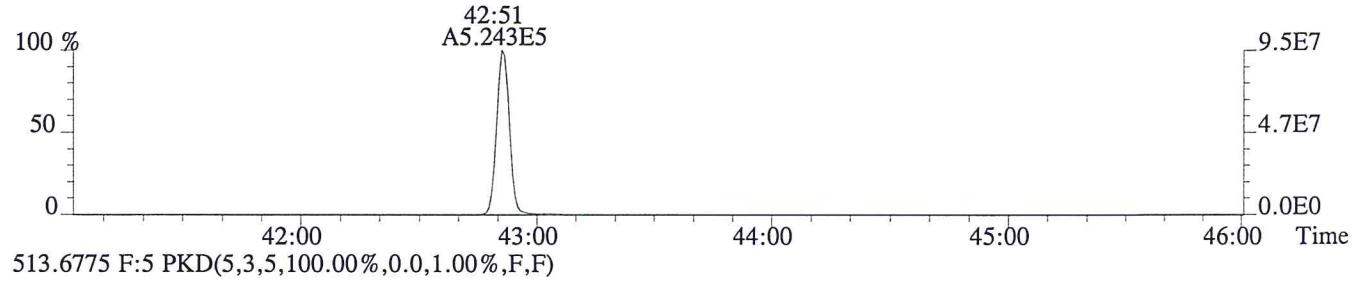
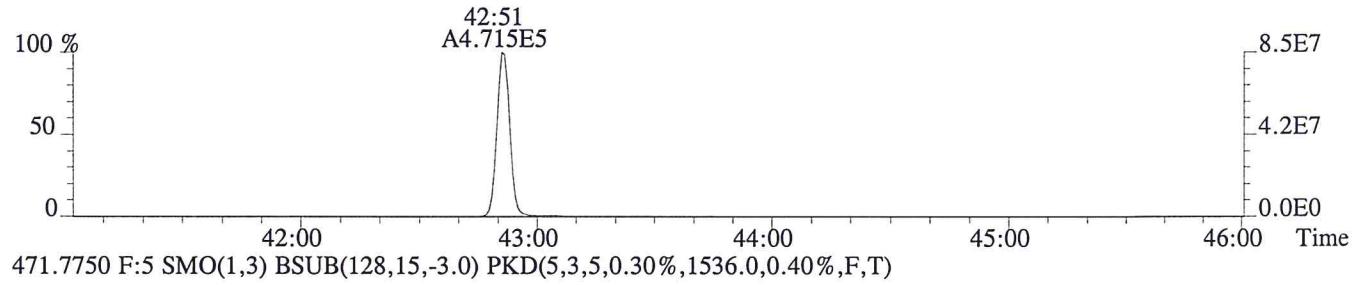
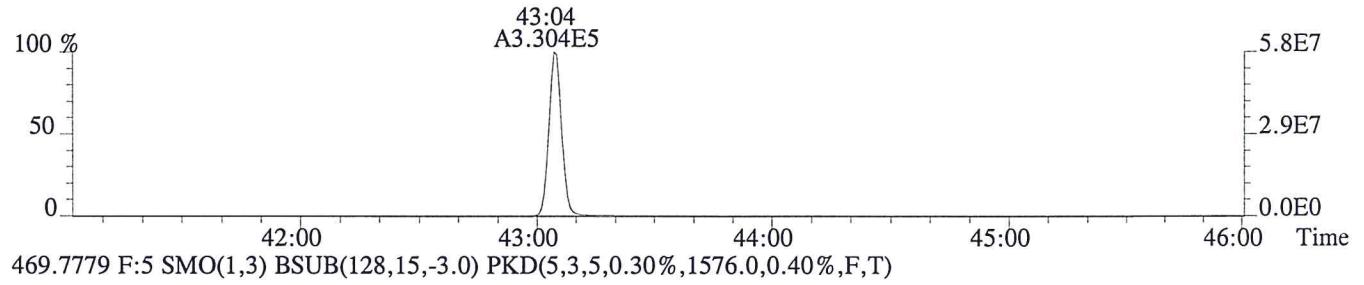
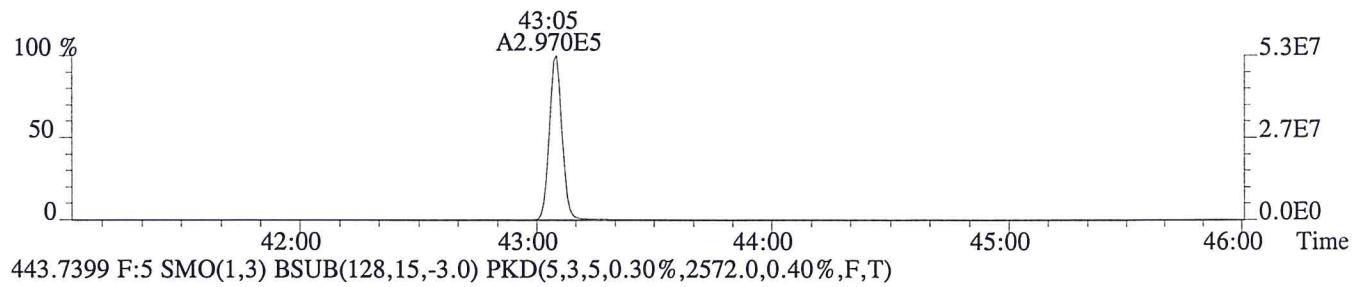
File:P600007 #1-213 Acq:19-AUG-2015 14:58:32 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:CS3  
 407.7818 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,11736.0,0.50%,F,T)



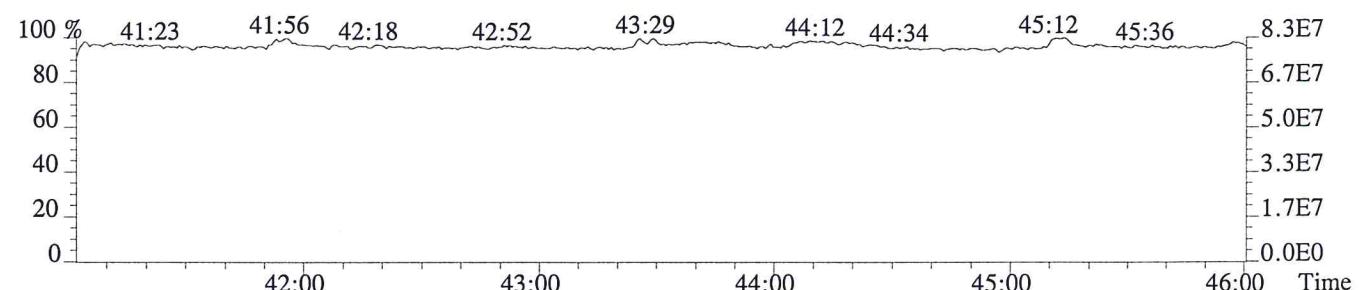
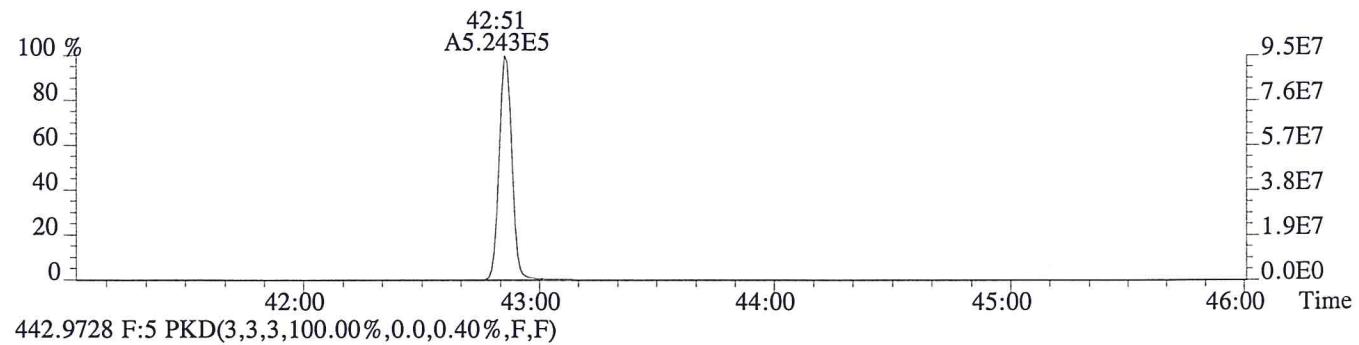
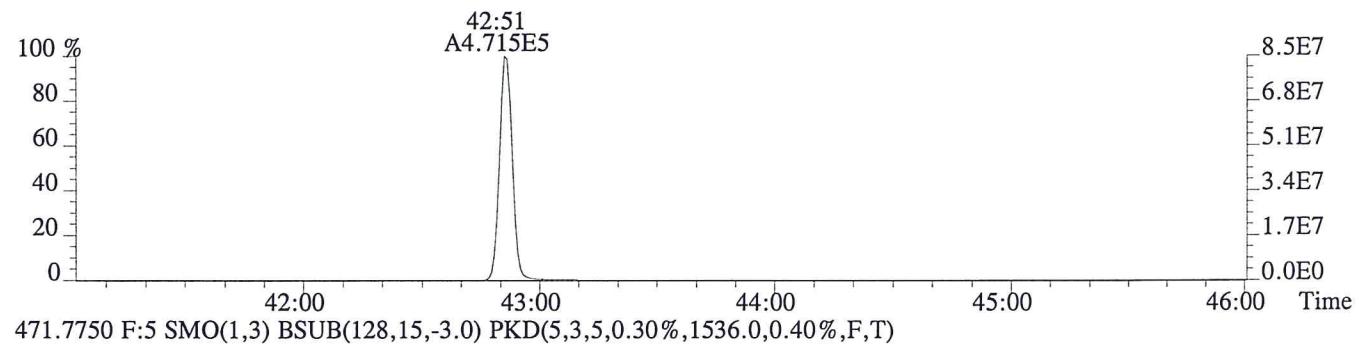
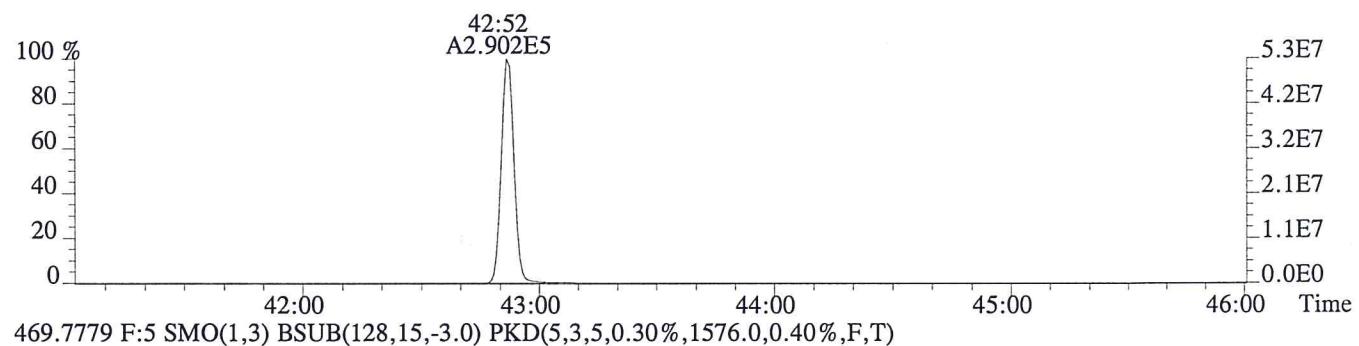
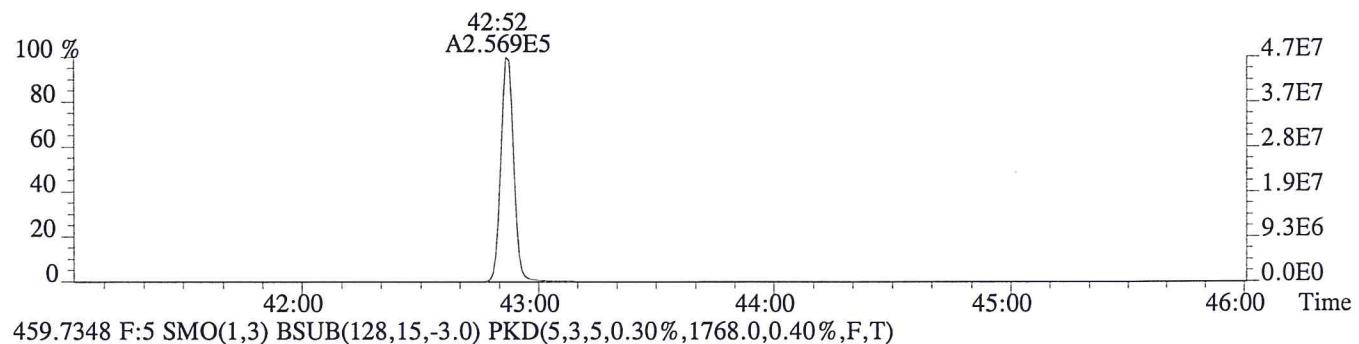
File:P600007 #1-213 Acq:19-AUG-2015 14:58:32 Probe EI+ Magnet SIR VG BioTech Mass spect&  
 Sample#1 Exp:CS3  
 423.7766 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1020.0,0.40%,F,T)



File:P600007 #1-448 Acq:19-AUG-2015 14:58:32 Probe EI+ Magnet SIR VG BioTech Mass spect&  
 Sample#1 Exp:CS3  
 441.7428 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1296.0,0.40%,F,T)



File:P600007 #1-448 Acq:19-AUG-2015 14:58:32 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:CS3  
 457.7377 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,964.0,0.40%,F,T)



ALS ENVIRONMENTAL  
Sample Response Summary

CLIENT ID.  
76558

Run #5      Filename P600008      Samp: 1      Inj: 1      Acquired: 19-AUG-15 15:47:35  
Processed: 20-AUG-15 08:56:29      Sample ID: CS4

Typ	Name	RT-1	Resp 1	Resp 2	Ratio	Meet	Mod?	RRF	
1	Unk	2,3,7,8-TCDF	29:04	1.687e+05	2.207e+05	0.76	yes	no	0.941
2	Unk	1,2,3,7,8-PeCDF	33:03	1.274e+06	8.207e+05	1.55	yes	no	0.987
3	Unk	2,3,4,7,8-PeCDF	33:55	1.215e+06	7.888e+05	1.54	yes	no	0.934
4	Unk	1,2,3,4,7,8-HxCDF	36:31	1.049e+06	8.590e+05	1.22	yes	no	1.189
5	Unk	1,2,3,6,7,8-HxCDF	36:37	1.078e+06	8.697e+05	1.24	yes	no	1.126
6	Unk	2,3,4,6,7,8-HxCDF	37:06	1.028e+06	8.378e+05	1.23	yes	no	1.116
7	Unk	1,2,3,7,8,9-HxCDF	37:50	9.900e+05	8.048e+05	1.23	yes	no	1.158
8	Unk	1,2,3,4,6,7,8-HpCDF	39:04	9.017e+05	8.896e+05	1.01	yes	no	1.373
9	Unk	1,2,3,4,7,8,9-HpCDF	40:30	9.086e+05	8.823e+05	1.03	yes	no	1.287
10	Unk	OCDF	43:05	1.194e+06	1.326e+06	0.90	yes	no	1.257
11	Unk	2,3,7,8-TCDD	29:48	1.507e+05	1.934e+05	0.78	yes	no	1.010
12	Unk	1,2,3,7,8-PeCDD	34:12	8.898e+05	5.694e+05	1.56	yes	no	0.932
13	Unk	1,2,3,4,7,8-HxCDD	37:14	7.584e+05	6.099e+05	1.24	yes	no	1.026
14	Unk	1,2,3,6,7,8-HxCDD	37:19	7.164e+05	5.773e+05	1.24	yes	no	1.021
15	Unk	1,2,3,7,8,9-HxCDD	37:33	8.161e+05	6.543e+05	1.25	yes	no	1.133
16	Unk	1,2,3,4,6,7,8-HpCDD	40:01	6.982e+05	6.733e+05	1.04	yes	no	1.034
17	Unk	OCDD	42:52	1.023e+06	1.149e+06	0.89	yes	no	1.111
18	IS	13C-2,3,7,8-TCDF	29:03	4.546e+05	5.724e+05	0.79	yes	no	1.379
19	IS	13C-1,2,3,7,8-PeCDF	33:03	6.414e+05	4.062e+05	1.58	yes	no	1.456
20	IS	13C-2,3,4,7,8-PeCDF	33:55	6.443e+05	4.075e+05	1.58	yes	no	1.465
21	IS	13C-1,2,3,4,7,8-HxCDF	36:30	2.707e+05	5.188e+05	0.52	yes	no	1.075
22	IS	13C-1,2,3,6,7,8-HxCDF	36:36	2.921e+05	5.589e+05	0.52	yes	no	1.158
23	IS	13C-2,3,4,6,7,8-HxCDF	37:05	2.847e+05	5.403e+05	0.53	yes	no	1.133
24	IS	13C-1,2,3,7,8,9-HxCDF	37:50	2.621e+05	5.028e+05	0.52	yes	no	1.024
25	IS	13C-1,2,3,4,6,7,8-HpCDF	39:04	2.007e+05	4.552e+05	0.44	yes	no	0.880
26	IS	13C-1,2,3,4,7,8,9-HpCDF	40:29	2.129e+05	4.784e+05	0.45	yes	no	0.914
27	IS	13C-2,3,7,8-TCDD	29:48	3.775e+05	4.793e+05	0.79	yes	no	1.193
28	IS	13C-1,2,3,7,8-PeCDD	34:11	4.772e+05	3.040e+05	1.57	yes	no	1.094
29	IS	13C-1,2,3,4,7,8-HxCDD	37:13	3.698e+05	2.938e+05	1.26	yes	no	0.906
30	IS	13C-1,2,3,6,7,8-HxCDD	37:18	3.505e+05	2.764e+05	1.27	yes	no	0.860
31	IS	13C-1,2,3,4,6,7,8-HpCDD	40:00	3.425e+05	3.233e+05	1.06	yes	no	0.892
32	IS	13C-OCDD	42:51	4.626e+05	5.176e+05	0.89	yes	no	0.642
33	RS/RT	13C-1,2,3,4-TCDD	29:15	3.253e+05	4.121e+05	0.79	yes	no	-
34	RS/RT	13C-1,2,3,7,8,9-HxCDD	37:32	4.098e+05	3.273e+05	1.25	yes	no	-
35	C/Up	37Cl-2,3,7,8-TCDD	29:48	3.596e+05				no	1.263

---

ALS ENVIRONMENTAL  
10450 Stancliff Rd, Suite 115  
Houston, TX 77099  
Office (713) 266-1599. Fax (713) 266-0130

[www.alsglobal.com](http://www.alsglobal.com)

ALS ENVIRONMENTAL  
Signal/Noise Height Ratio Summary

CLIENT ID.  
76558

Run #5   Filename P600008              Samp: 1    Inj: 1              Acquired: 19-AUG-15 15:47:35  
Processed: 20-AUG-15 08:56:29              LAB. ID: CS4

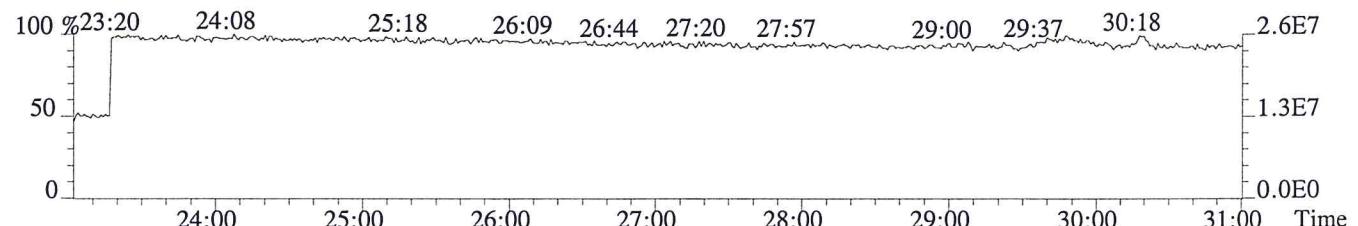
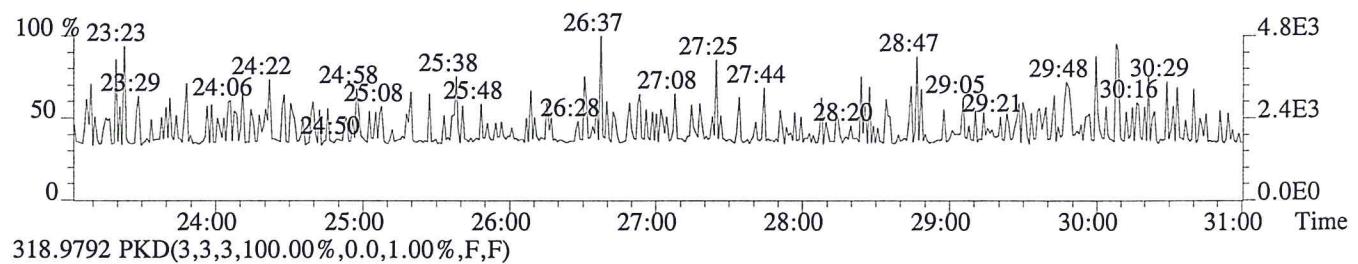
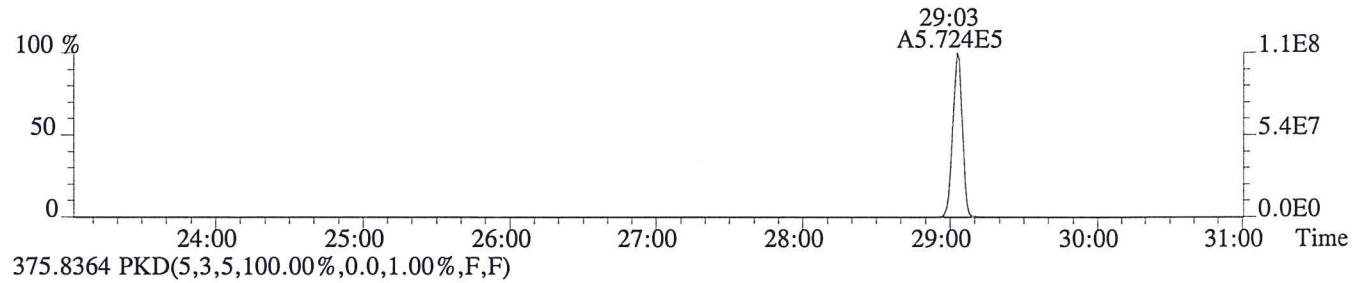
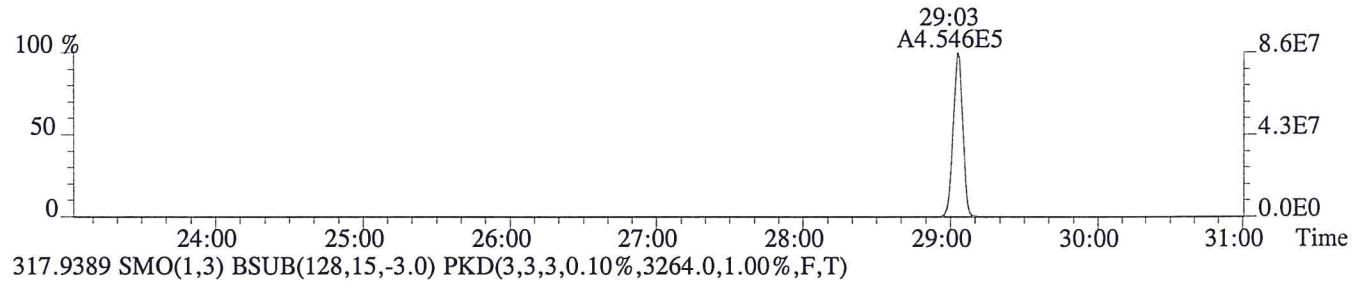
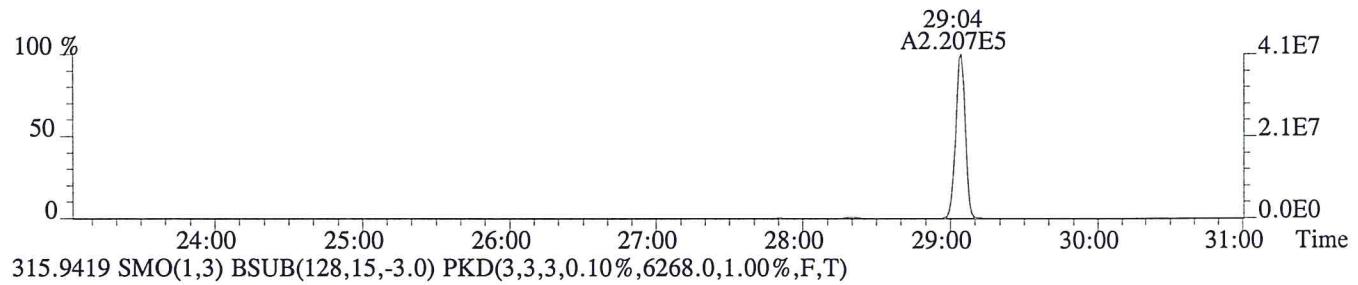
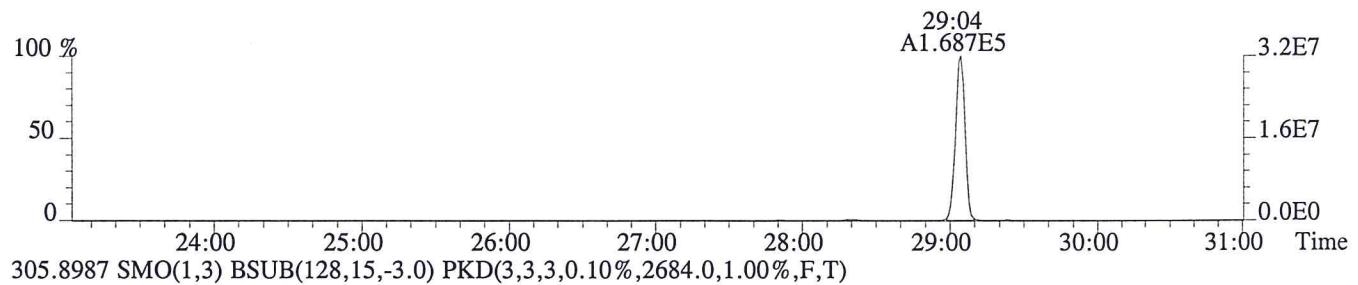
	Name	Signal 1	Noise 1	S/N Rat.1	Signal 2	Noise 2	S/N Rat.2
1	2,3,7,8-TCDF	3.19e+07	2.13e+03	1.5e+04	4.14e+07	2.68e+03	1.5e+04
2	1,2,3,7,8-PeCDF	2.51e+08	2.28e+03	1.1e+05	1.61e+08	3.81e+03	4.2e+04
3	2,3,4,7,8-PeCDF	2.50e+08	2.28e+03	1.1e+05	1.62e+08	3.81e+03	4.2e+04
4	1,2,3,4,7,8-HxCDF	2.26e+08	3.59e+03	6.3e+04	1.85e+08	1.92e+03	9.7e+04
5	1,2,3,6,7,8-HxCDF	2.37e+08	3.59e+03	6.6e+04	1.91e+08	1.92e+03	1.0e+05
6	2,3,4,6,7,8-HxCDF	2.27e+08	3.59e+03	6.3e+04	1.87e+08	1.92e+03	9.8e+04
7	1,2,3,7,8,9-HxCDF	2.16e+08	3.59e+03	6.0e+04	1.75e+08	1.92e+03	9.1e+04
8	1,2,3,4,6,7,8-HpCDF	1.94e+08	2.06e+04	9.4e+03	1.94e+08	1.09e+04	1.8e+04
9	1,2,3,4,7,8,9-HpCDF	1.89e+08	2.06e+04	9.2e+03	1.85e+08	1.09e+04	1.7e+04
10	OCDF	2.16e+08	1.33e+03	1.6e+05	2.39e+08	3.02e+03	7.9e+04
11	2,3,7,8-TCDD	3.06e+07	1.70e+03	1.8e+04	3.92e+07	2.12e+03	1.8e+04
12	1,2,3,7,8-PeCDD	1.81e+08	3.26e+03	5.6e+04	1.15e+08	2.08e+03	5.5e+04
13	1,2,3,4,7,8-HxCDD	1.72e+08	1.51e+03	1.1e+05	1.38e+08	1.90e+03	7.3e+04
14	1,2,3,6,7,8-HxCDD	1.58e+08	1.51e+03	1.0e+05	1.29e+08	1.90e+03	6.8e+04
15	1,2,3,7,8,9-HxCDD	1.78e+08	1.51e+03	1.2e+05	1.44e+08	1.90e+03	7.6e+04
16	1,2,3,4,6,7,8-HpCDD	1.49e+08	1.97e+03	7.5e+04	1.43e+08	2.87e+03	5.0e+04
17	OCDD	1.89e+08	1.17e+03	1.6e+05	2.13e+08	2.25e+03	9.5e+04
18	13C-2,3,7,8-TCDF	8.58e+07	6.27e+03	1.4e+04	1.09e+08	3.26e+03	3.3e+04
19	13C-1,2,3,7,8-PeCDF	1.25e+08	1.66e+03	7.5e+04	7.87e+07	2.52e+03	3.1e+04
20	13C-2,3,4,7,8-PeCDF	1.31e+08	1.66e+03	7.9e+04	8.26e+07	2.52e+03	3.3e+04
21	13C-1,2,3,4,7,8-HxCDF	5.77e+07	3.12e+03	1.9e+04	1.11e+08	3.24e+03	3.4e+04
22	13C-1,2,3,6,7,8-HxCDF	6.34e+07	3.12e+03	2.0e+04	1.23e+08	3.24e+03	3.8e+04
23	13C-2,3,4,6,7,8-HxCDF	6.32e+07	3.12e+03	2.0e+04	1.20e+08	3.24e+03	3.7e+04
24	13C-1,2,3,7,8,9-HxCDF	5.72e+07	3.12e+03	1.8e+04	1.09e+08	3.24e+03	3.4e+04
25	13C-1,2,3,4,6,7,8-HpCDF	4.33e+07	1.03e+04	4.2e+03	9.74e+07	1.40e+04	7.0e+03
26	13C-1,2,3,4,7,8,9-HpCDF	4.31e+07	1.03e+04	4.2e+03	9.83e+07	1.40e+04	7.0e+03
27	13C-2,3,7,8-TCDD	7.56e+07	8.87e+03	8.5e+03	9.56e+07	4.60e+03	2.1e+04
28	13C-1,2,3,7,8-PeCDD	9.68e+07	2.12e+03	4.6e+04	6.20e+07	1.55e+03	4.0e+04
29	13C-1,2,3,4,7,8-HxCDD	8.40e+07	7.04e+03	1.2e+04	6.64e+07	2.89e+03	2.3e+04
30	13C-1,2,3,6,7,8-HxCDD	7.75e+07	7.04e+03	1.1e+04	6.14e+07	2.89e+03	2.1e+04
31	13C-1,2,3,4,6,7,8-HpCDD	7.21e+07	2.10e+03	3.4e+04	6.75e+07	1.63e+03	4.1e+04
32	13C-OCDD	8.47e+07	1.62e+03	5.2e+04	9.56e+07	1.40e+03	6.8e+04
33	13C-1,2,3,4-TCDD	6.26e+07	8.87e+03	7.1e+03	7.97e+07	4.60e+03	1.7e+04
34	13C-1,2,3,7,8,9-HxCDD	9.00e+07	7.04e+03	1.3e+04	7.17e+07	2.89e+03	2.5e+04
35	37Cl-2,3,7,8-TCDD	7.29e+07	2.57e+03	2.8e+04			

---

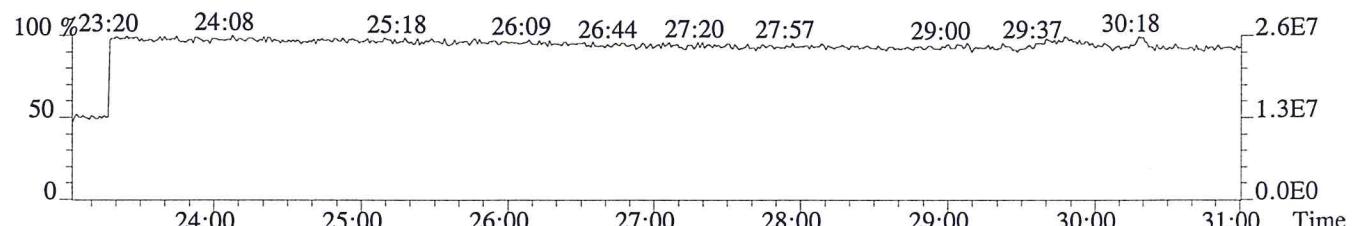
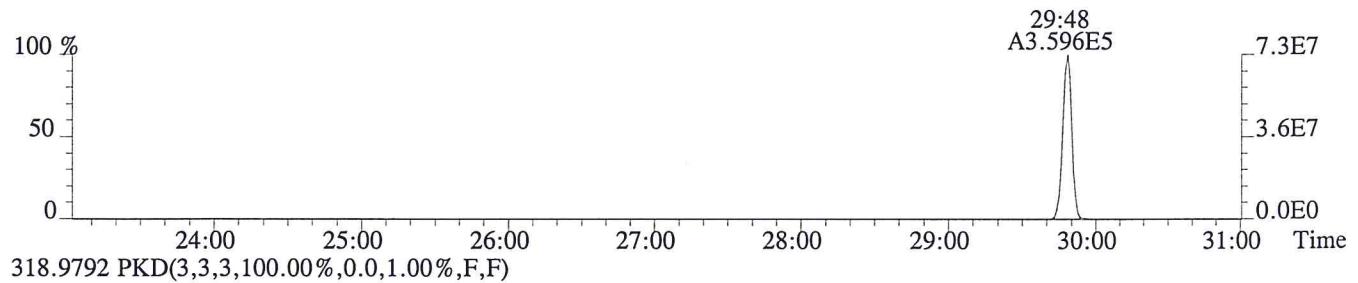
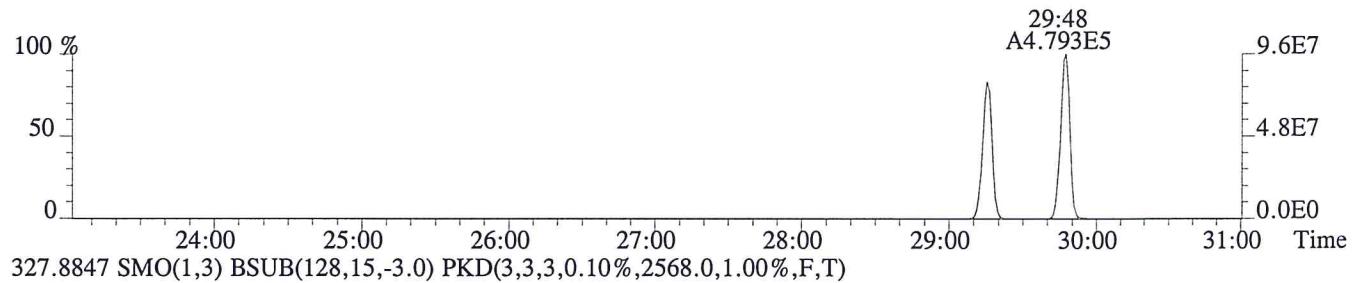
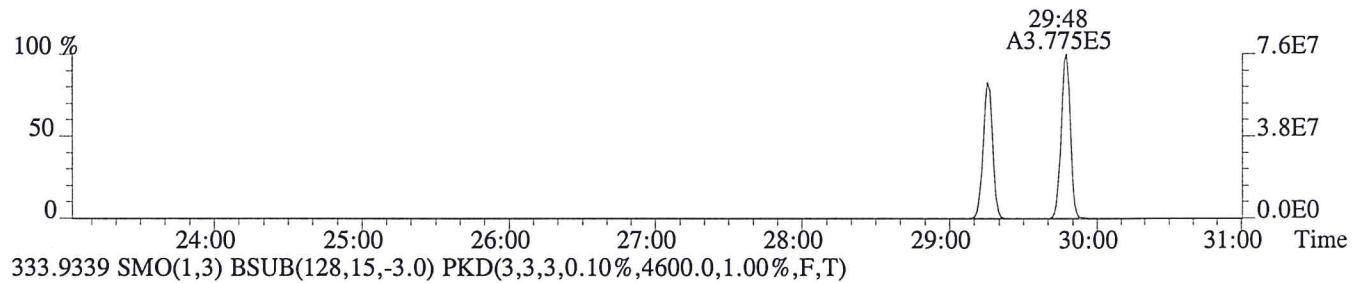
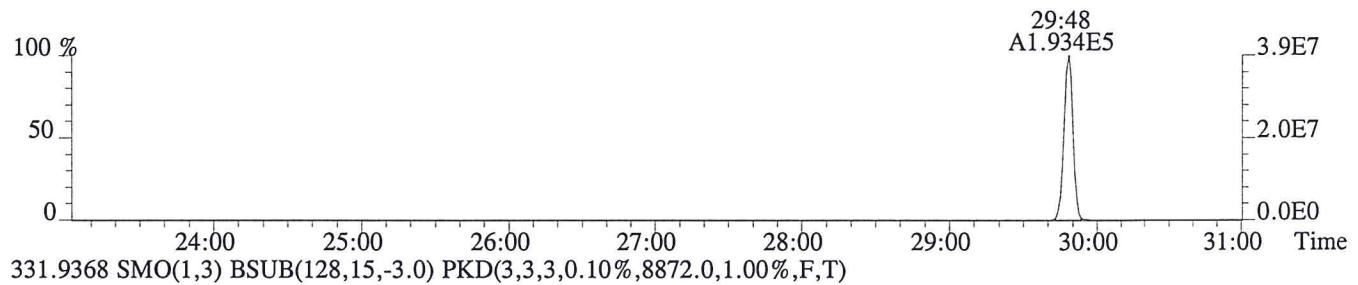
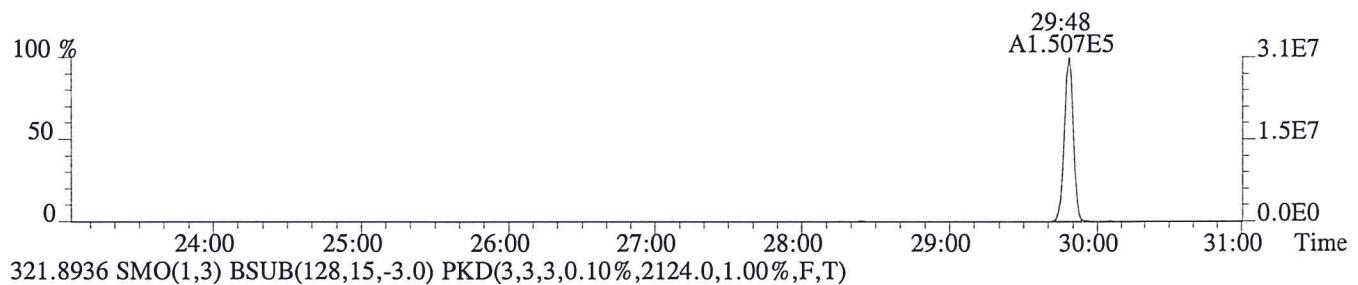
ALS ENVIRONMENTAL  
10450 Stancliff Rd., Suite 115  
Houston, TX 77099  
Office: (713) 266-1599. Fax: (713) 266-0130

www.alsglobal.com

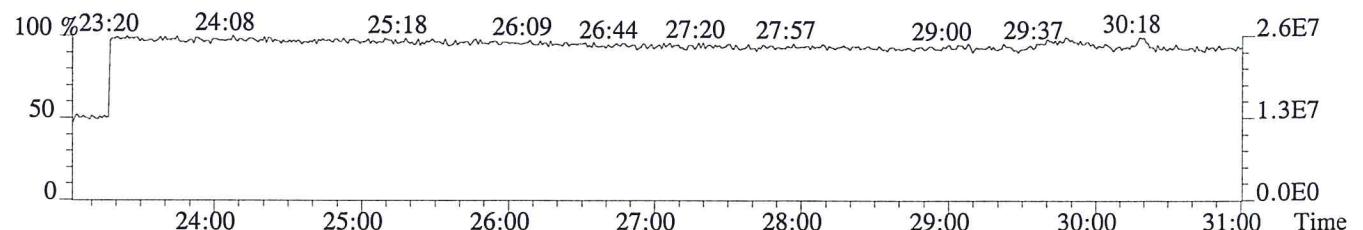
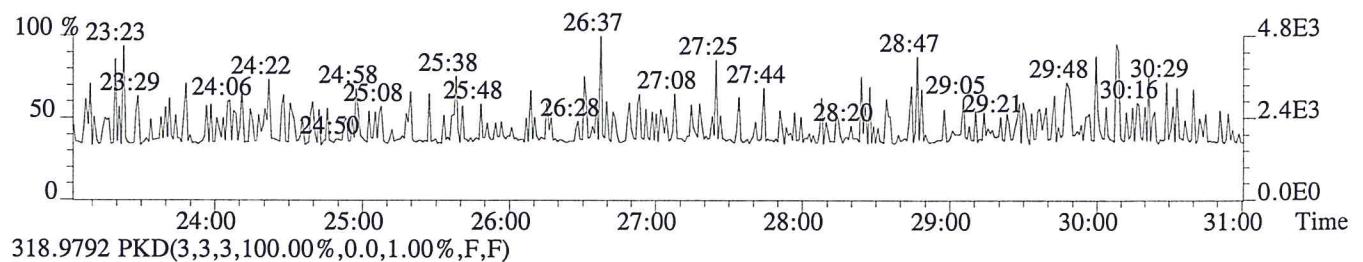
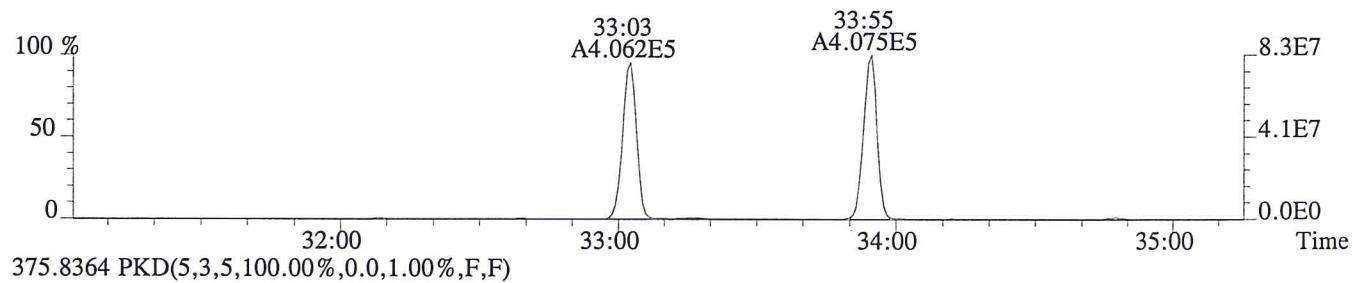
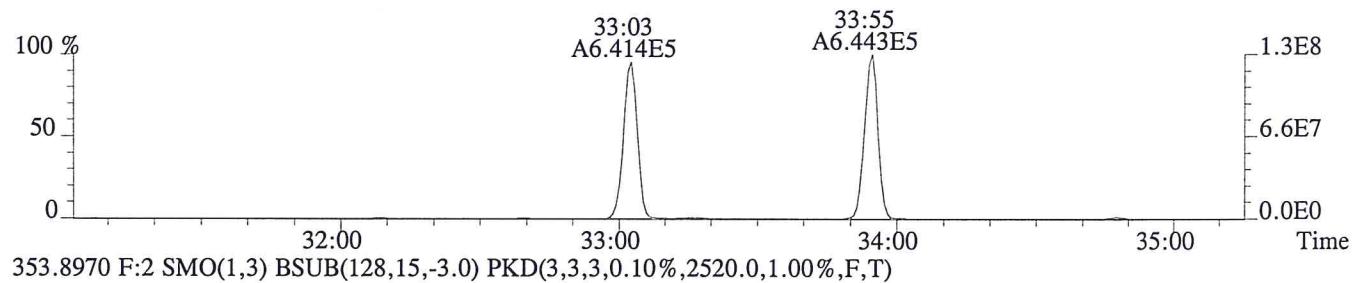
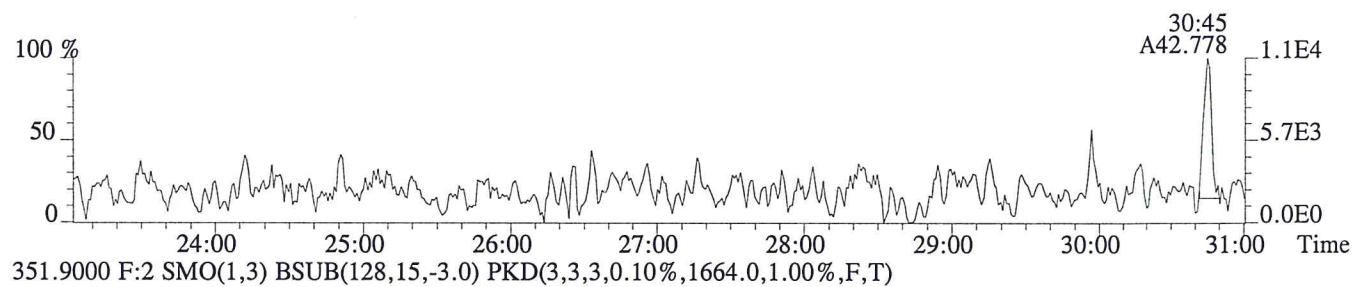
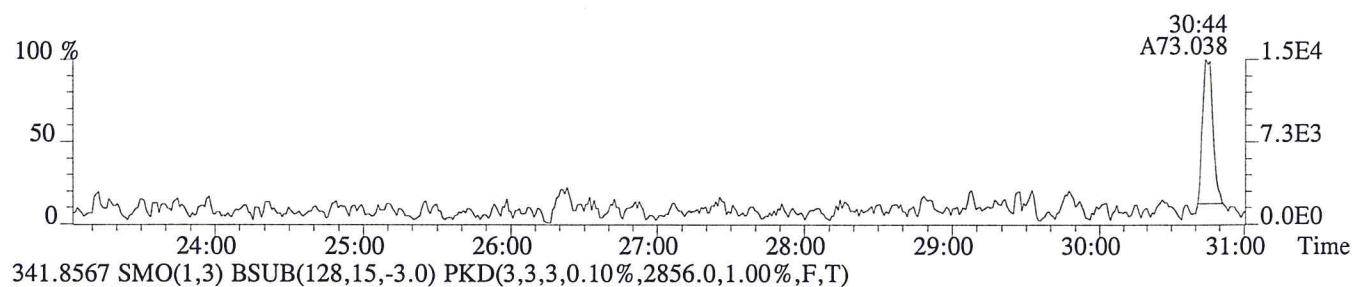
File:P600008 #1-566 Acq:19-AUG-2015 15:47:35 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:CS4  
 303.9016 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,2132.0,1.00%,F,T)



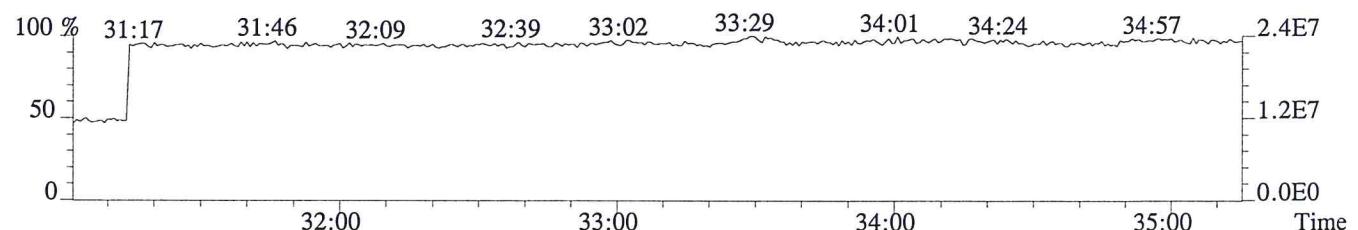
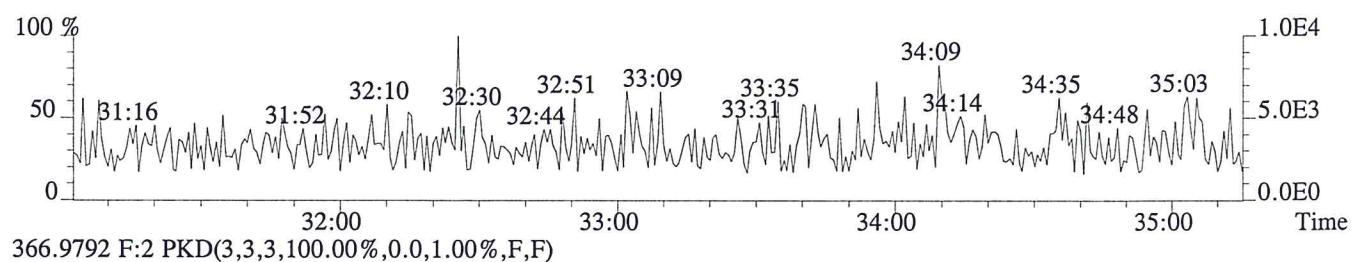
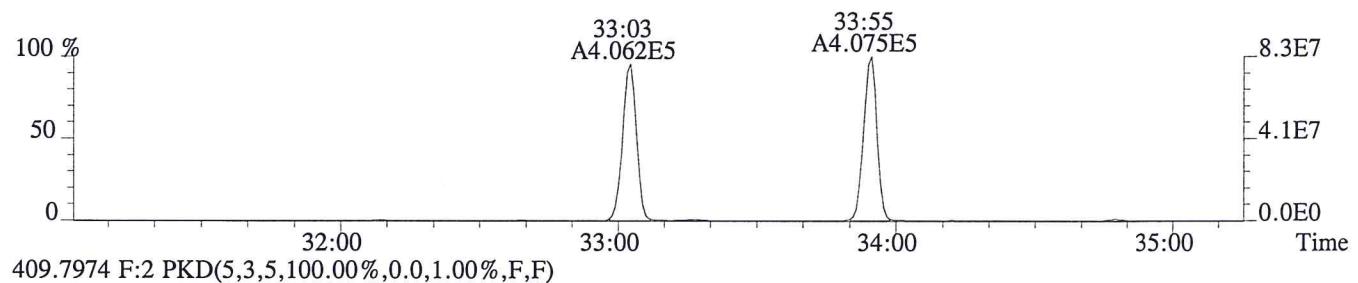
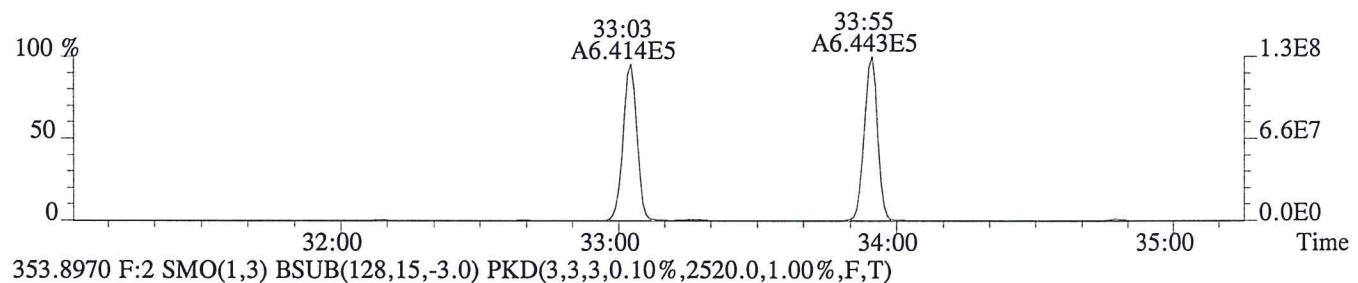
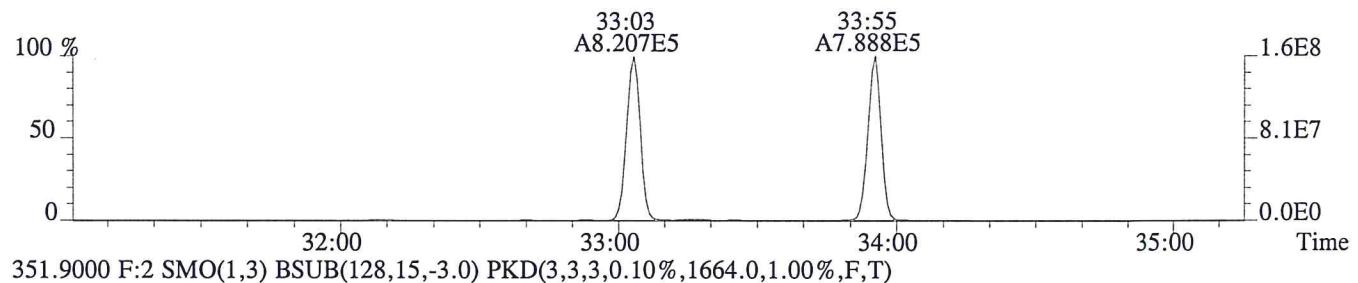
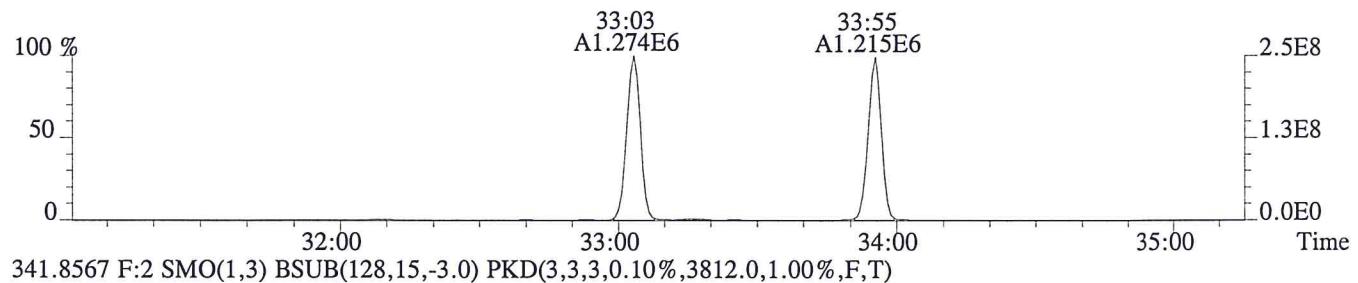
File:P600008 #1-566 Acq:19-AUG-2015 15:47:35 Probe EI+ Magnet SIR VG BioTech Mass spect&  
 Sample#1 Exp:CS4  
 319.8965 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1704.0,1.00%,F,T)



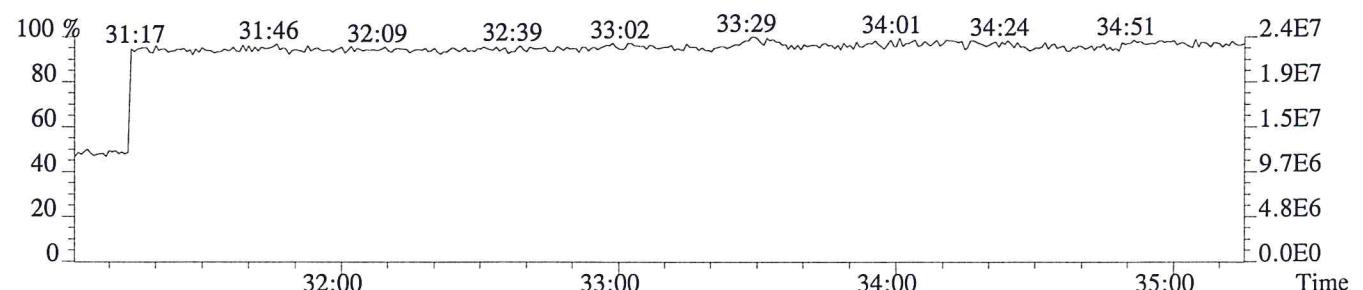
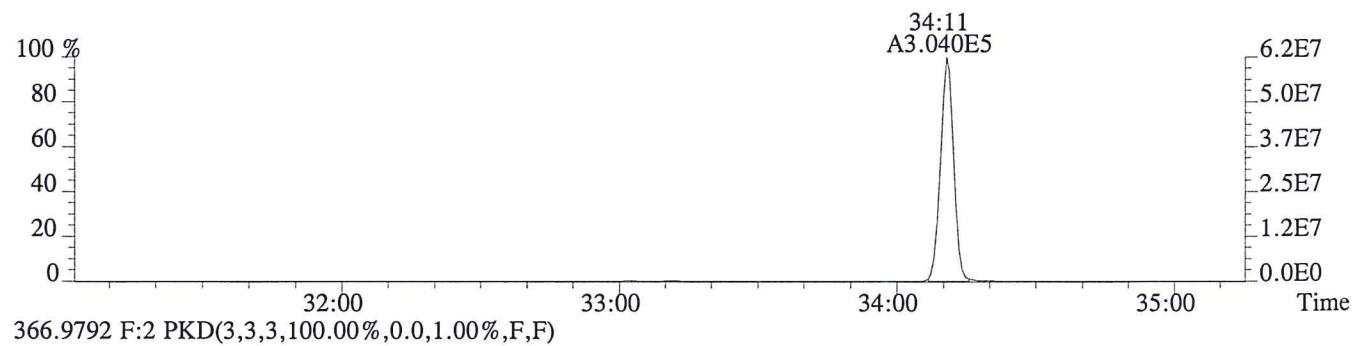
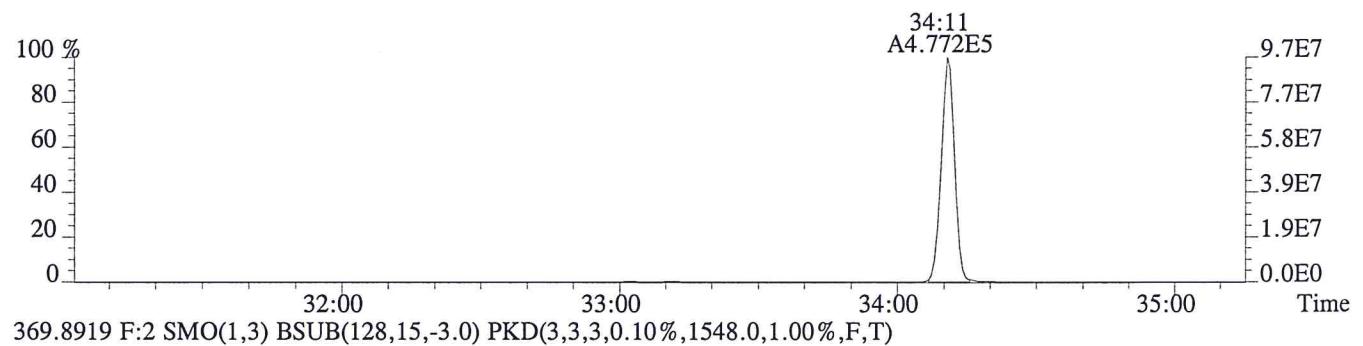
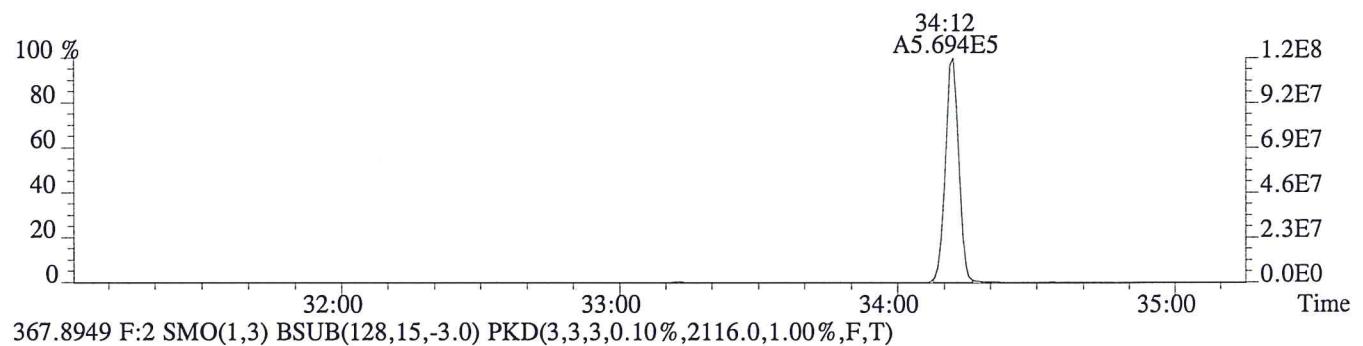
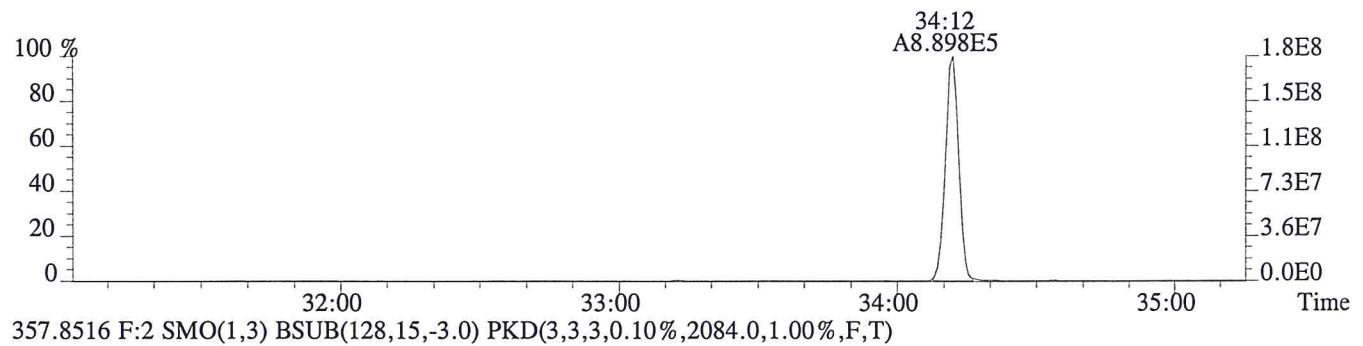
File:P600008 #1-566 Acq:19-AUG-2015 15:47:35 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:CS4  
 339.8597 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1604.0,1.00%,F,T)



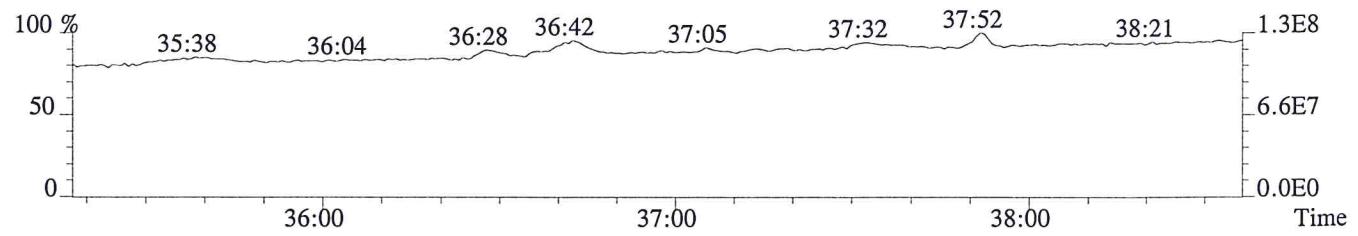
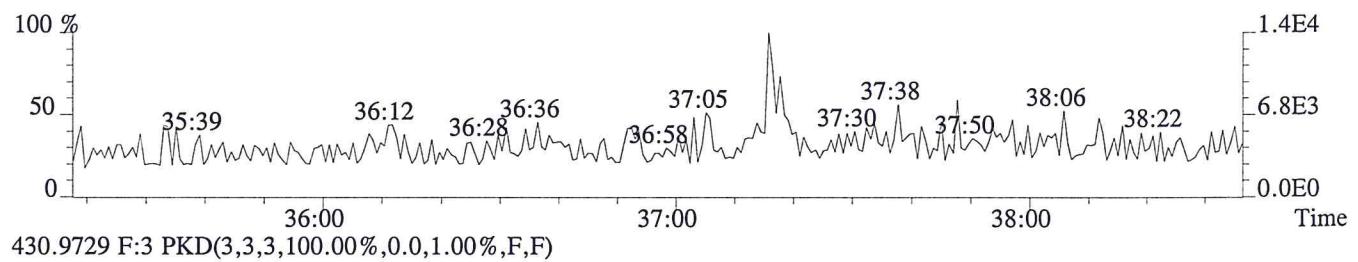
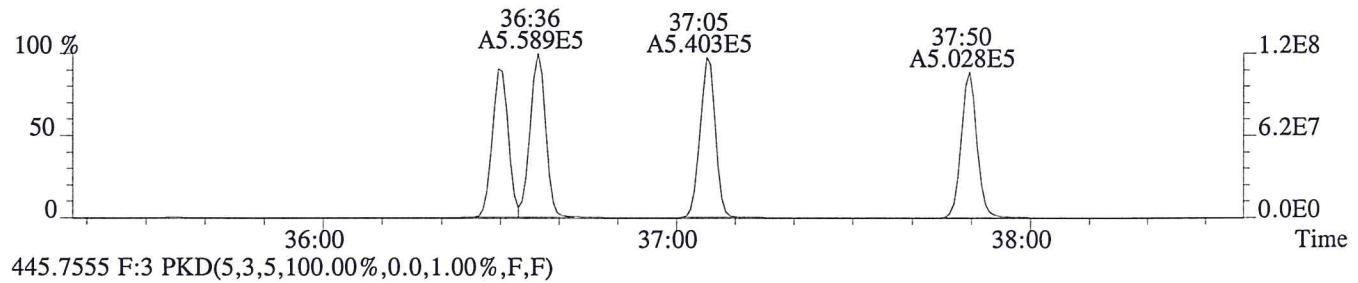
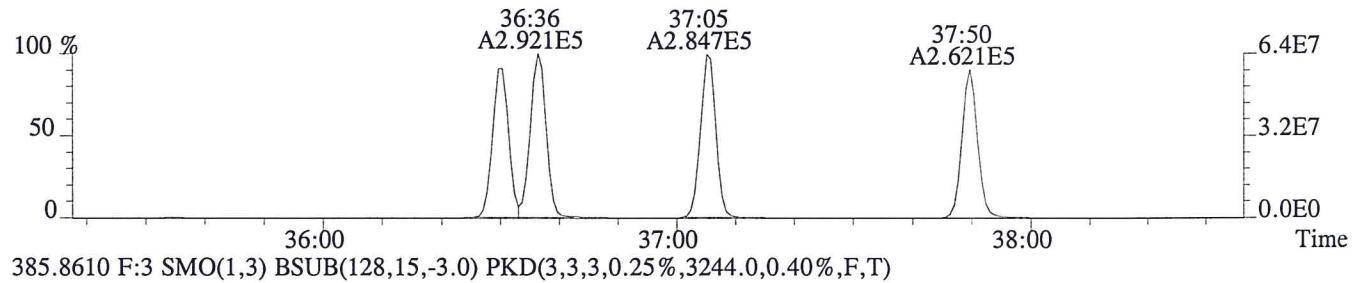
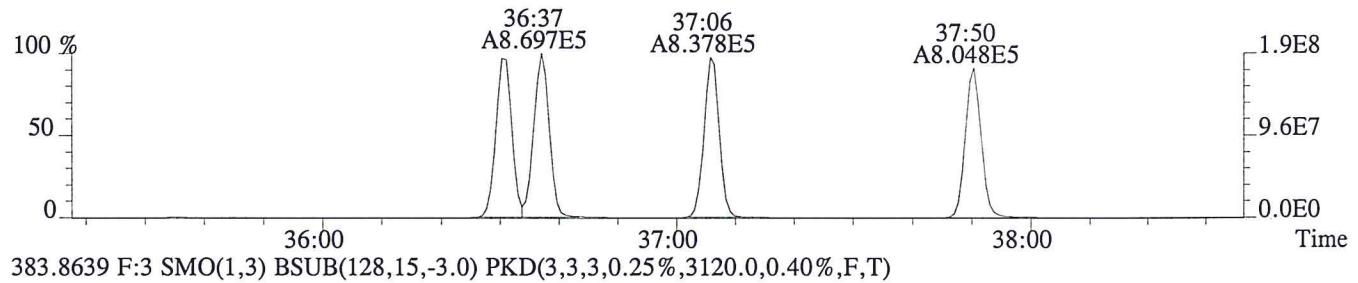
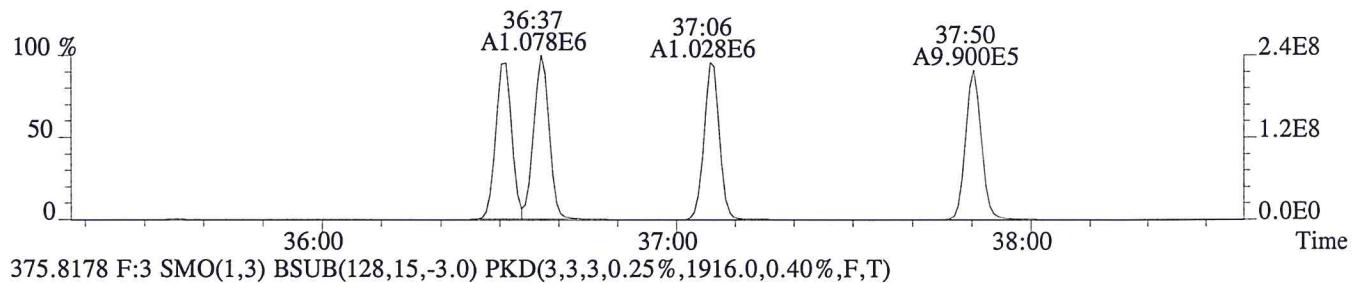
File:P600008 #1-380 Acq:19-AUG-2015 15:47:35 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:CS4  
 339.8597 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,2284.0,1.00%,F,T)



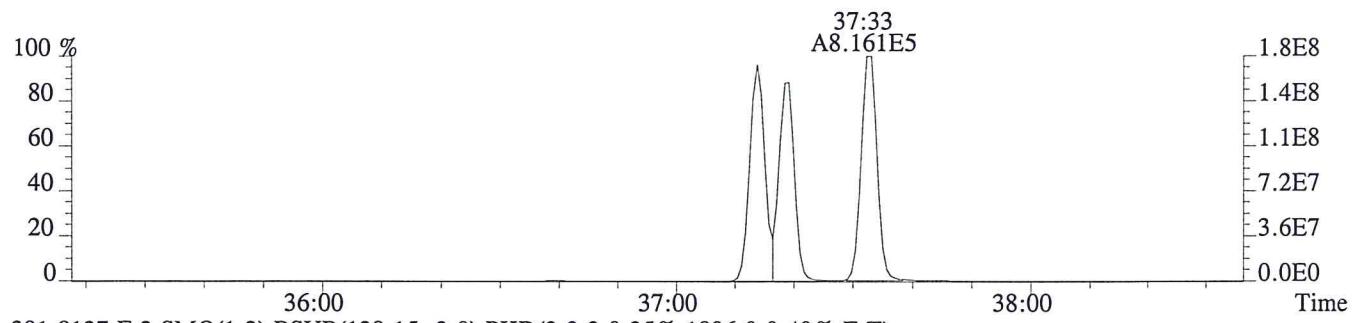
File:P600008 #1-380 Acq:19-AUG-2015 15:47:35 Probe EI+ Magnet SIR VG BioTech Mass spect&  
Sample#1 Exp:CS4  
355.8546 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,3260.0,1.00%,F,T)



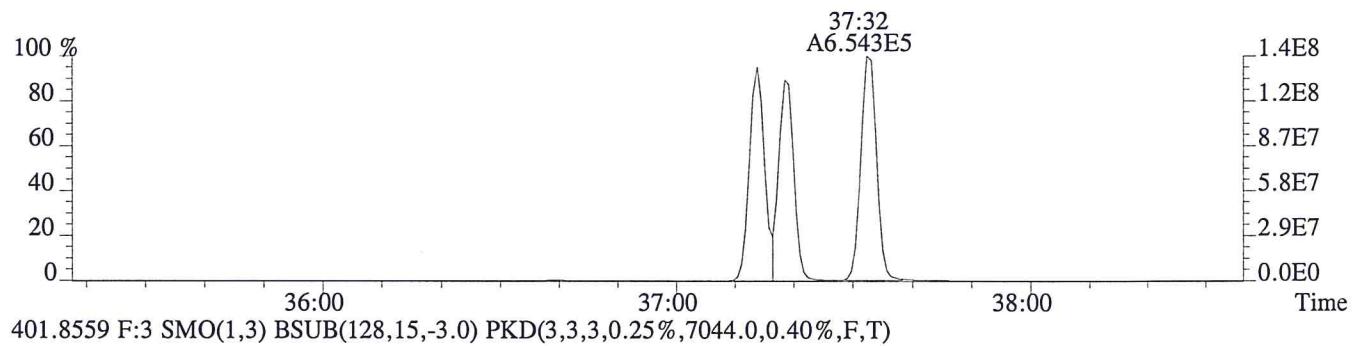
File:P600008 #1-299 Acq:19-AUG-2015 15:47:35 Probe EI+ Magnet SIR VG BioTech Mass spect&  
 Sample#1 Exp:CS4  
 373.8208 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,3588.0,0.40%,F,T)



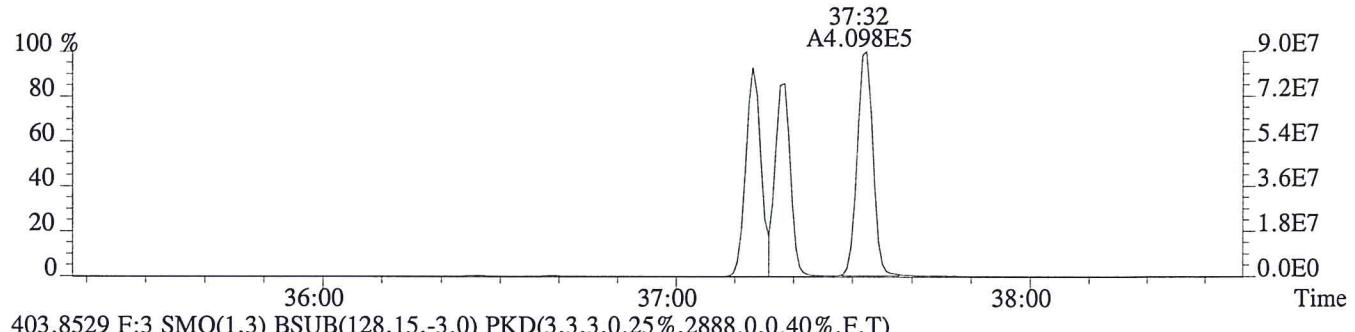
File:P600008 #1-299 Acq:19-AUG-2015 15:47:35 Probe EI+ Magnet SIR VG BioTech Mass spect&  
 Sample#1 Exp:CS4  
 389.8157 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1512.0,0.40%,F,T)



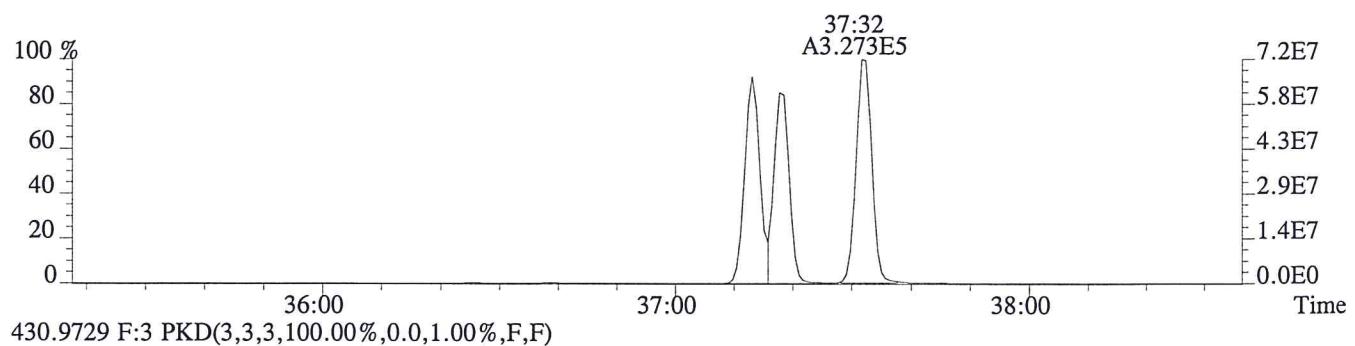
391.8127 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1896.0,0.40%,F,T)



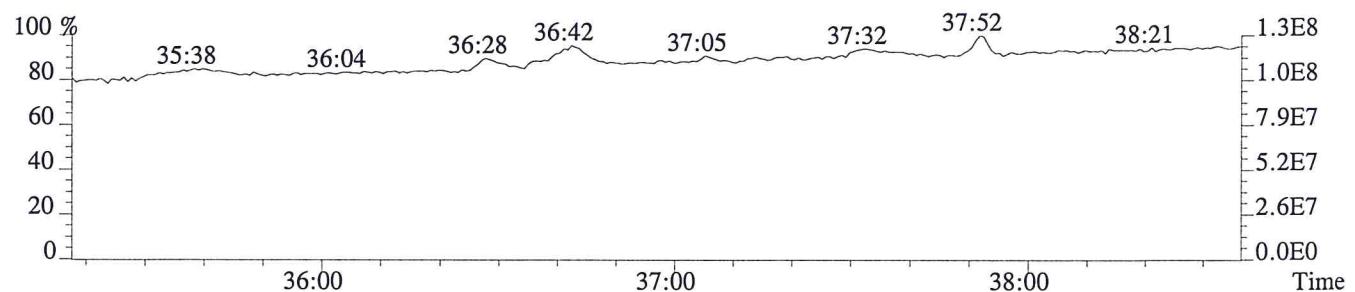
401.8559 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,7044.0,0.40%,F,T)



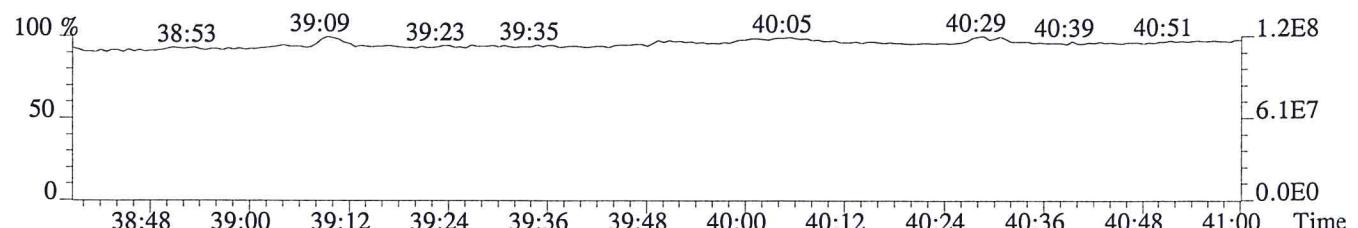
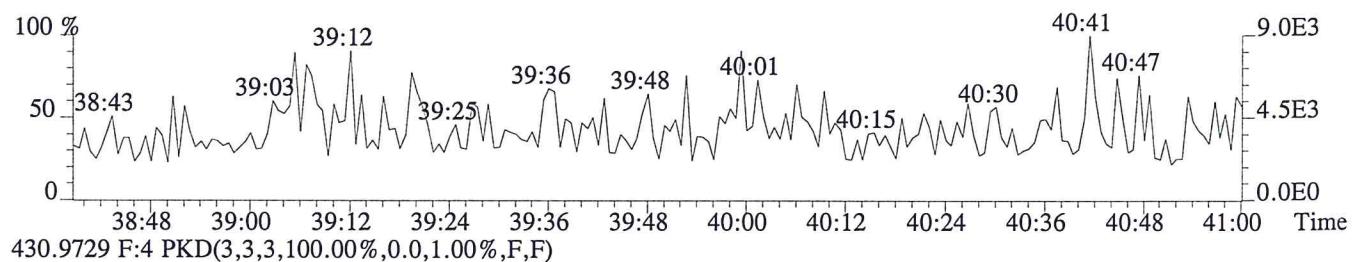
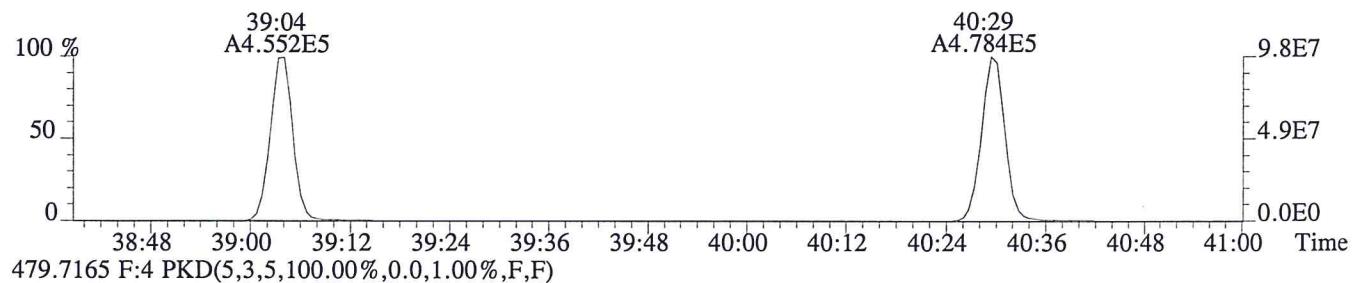
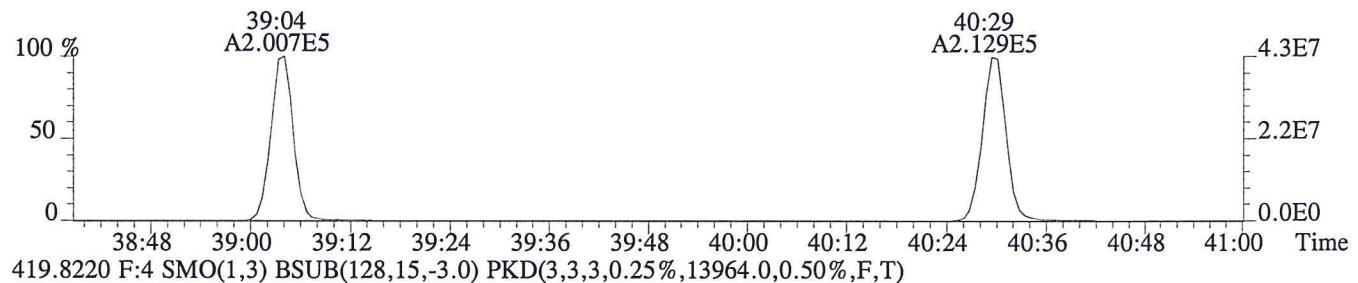
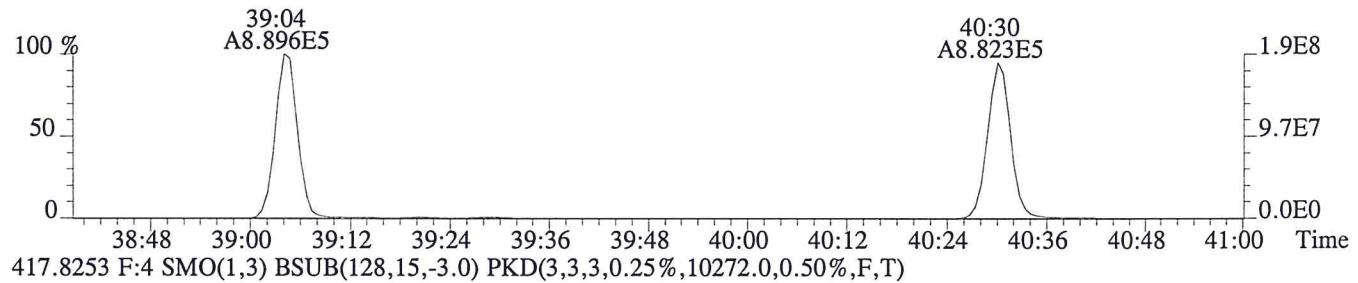
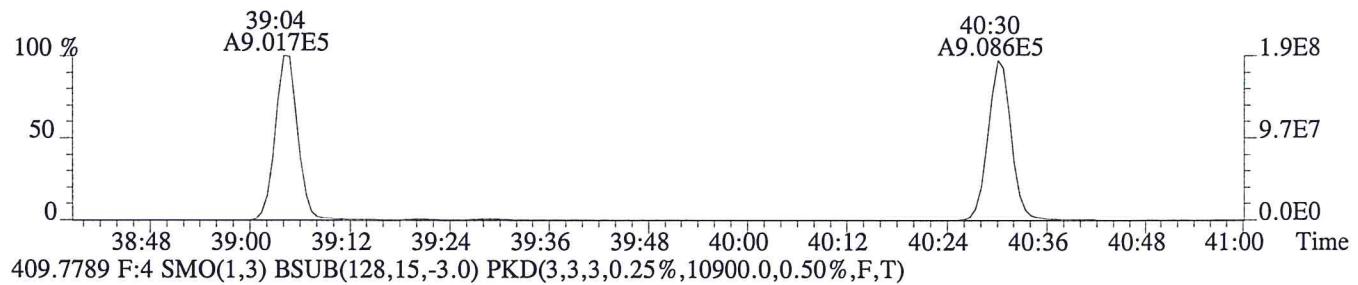
403.8529 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,2888.0,0.40%,F,T)



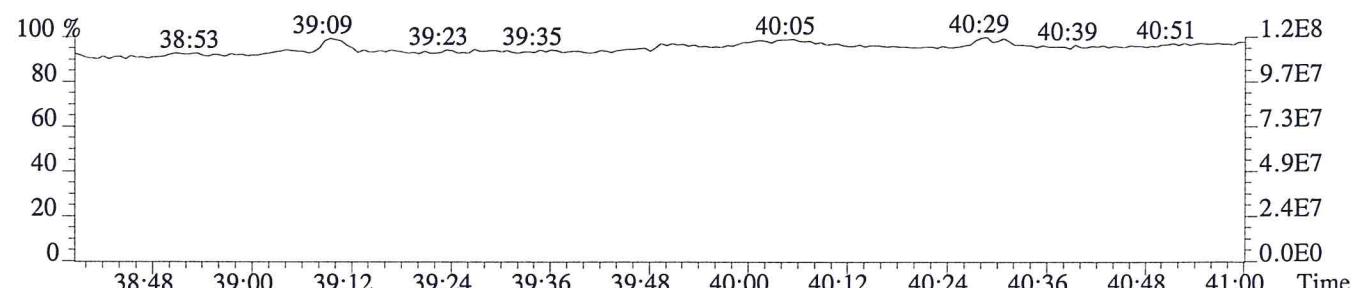
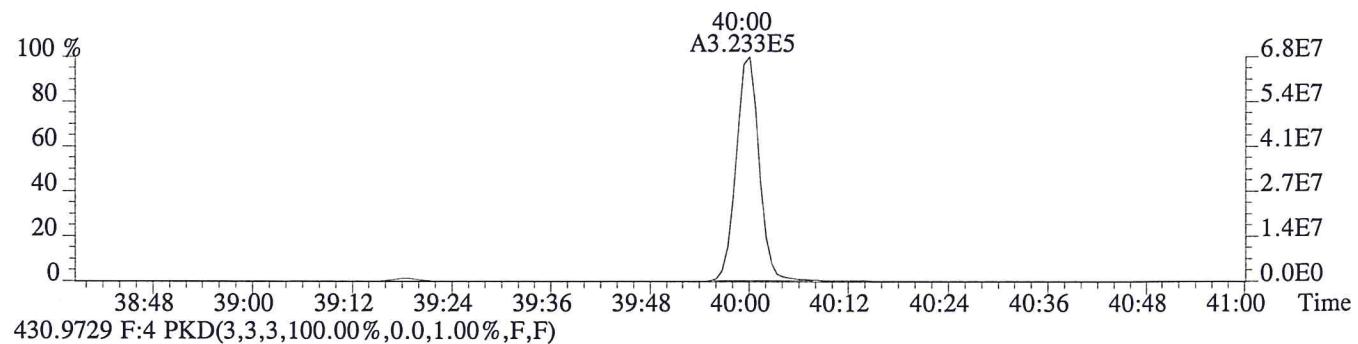
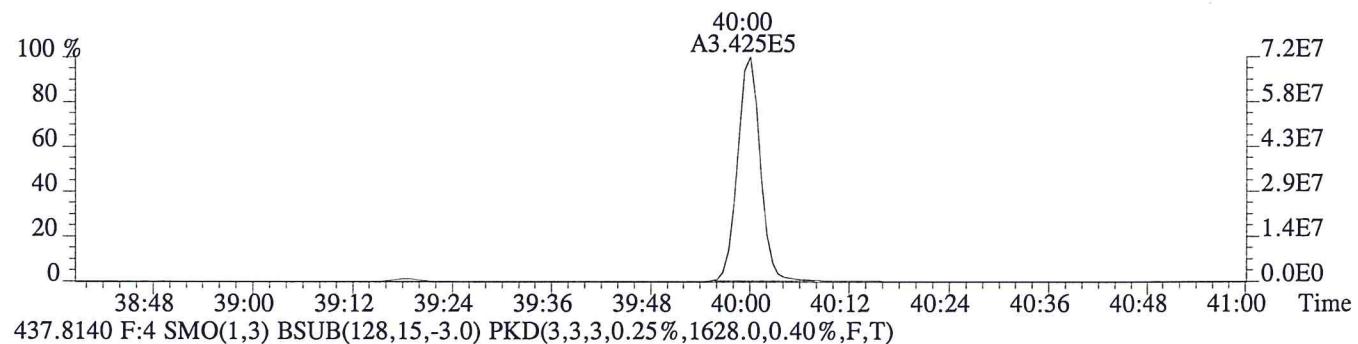
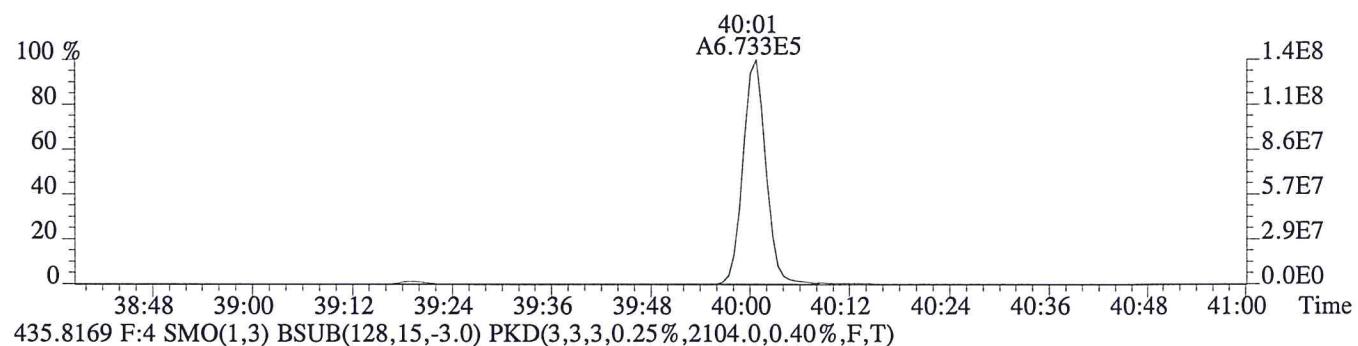
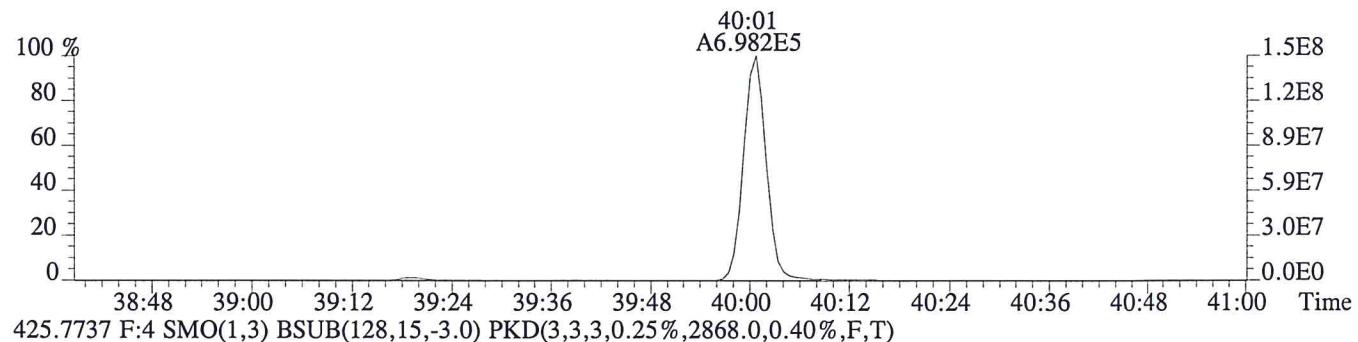
430.9729 F:3 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



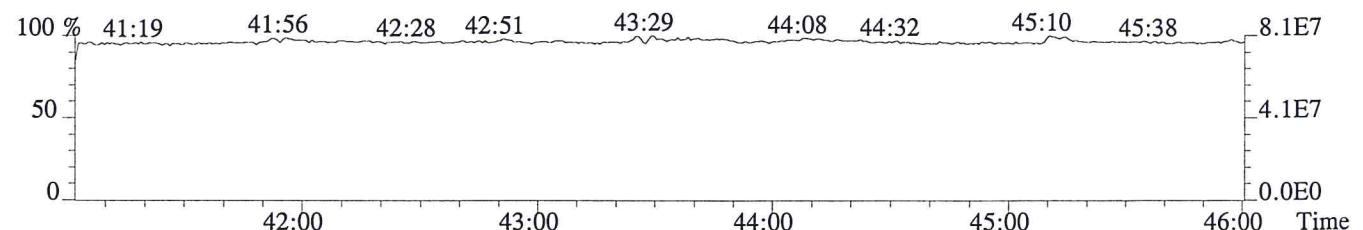
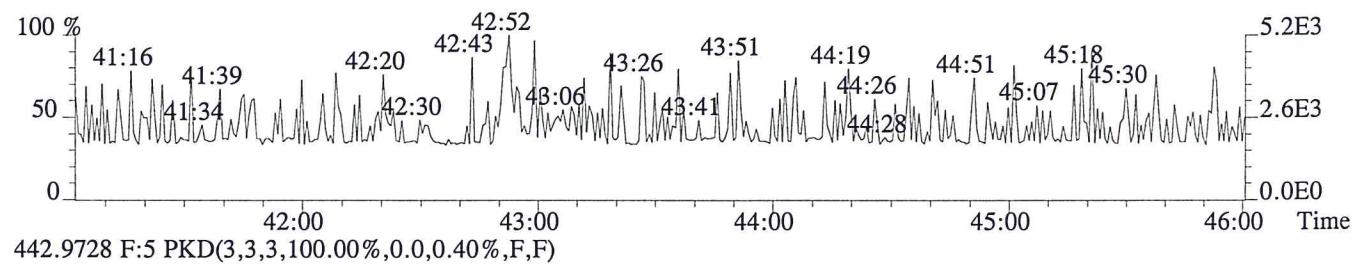
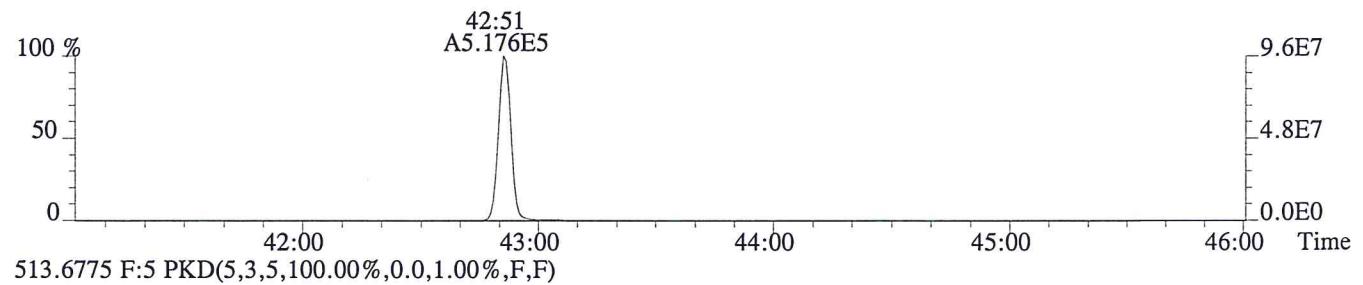
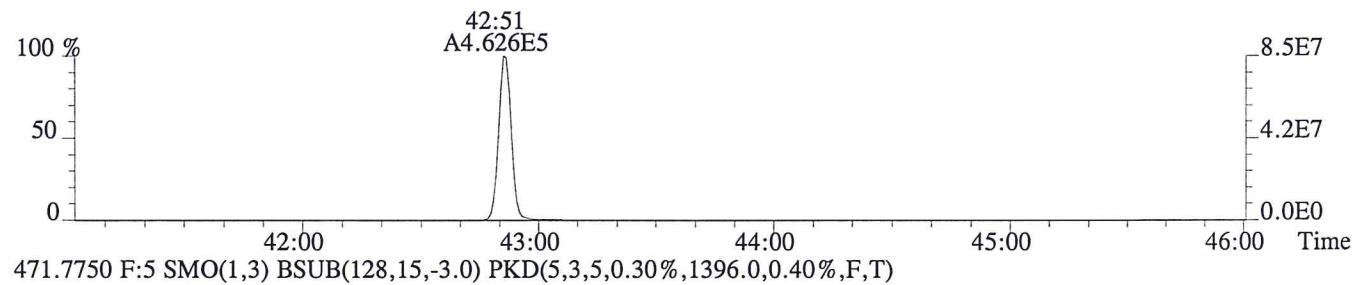
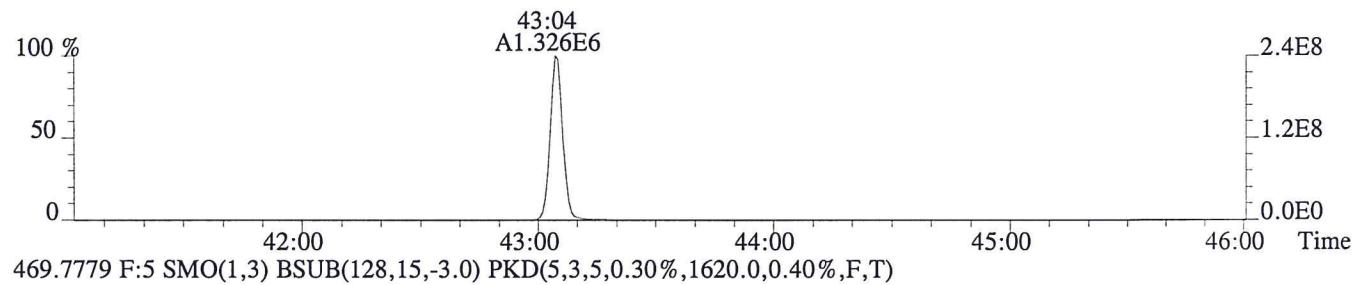
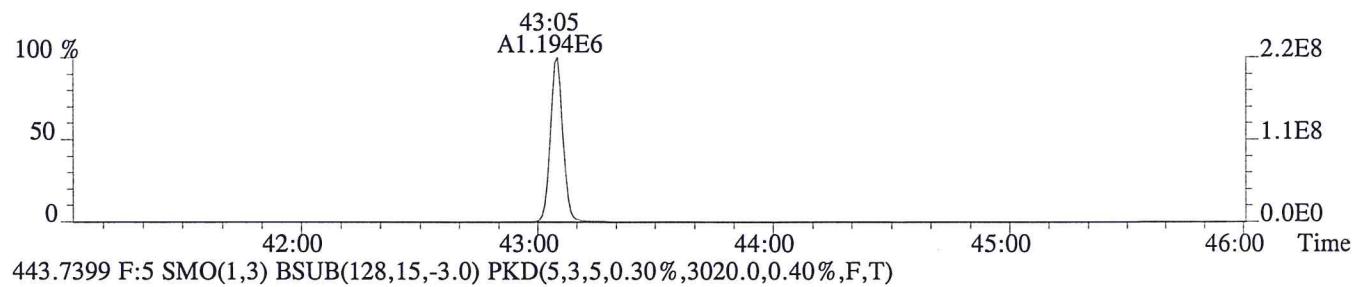
File:P600008 #1-213 Acq:19-AUG-2015 15:47:35 Probe EI+ Magnet SIR VG BioTech Mass spect&  
 Sample#1 Exp:CS4  
 407.7818 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,20640.0,0.50%,F,T)



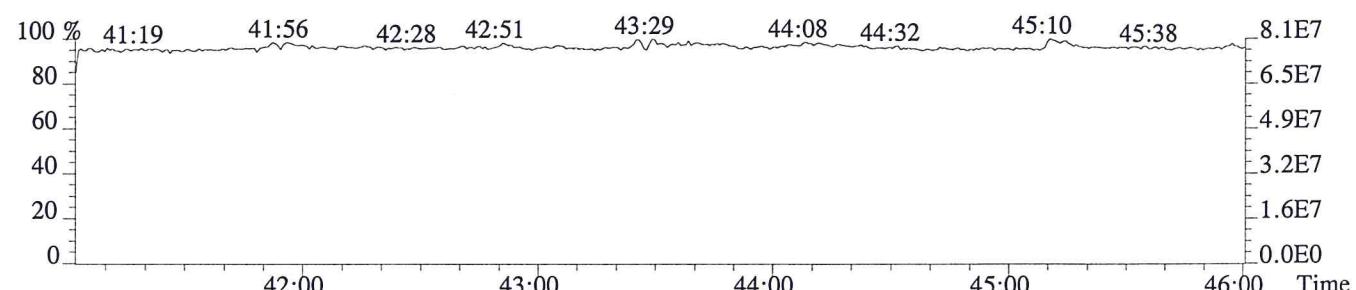
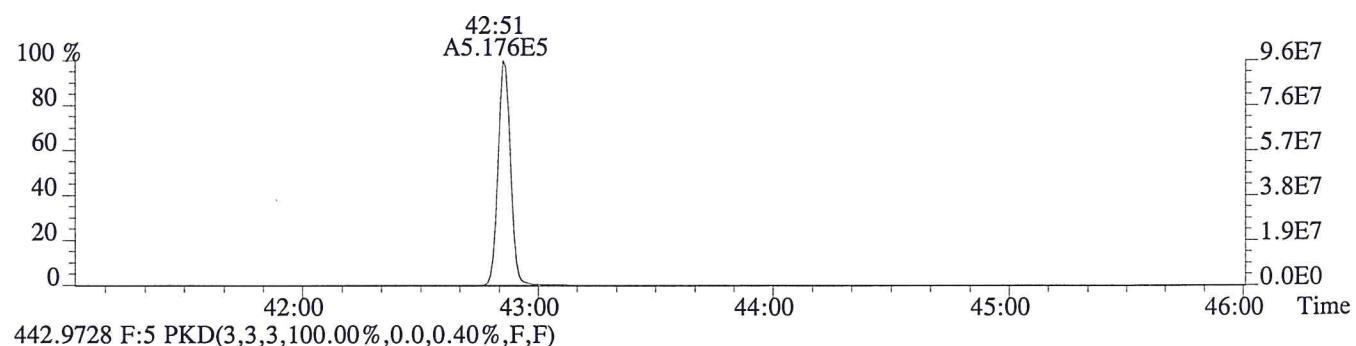
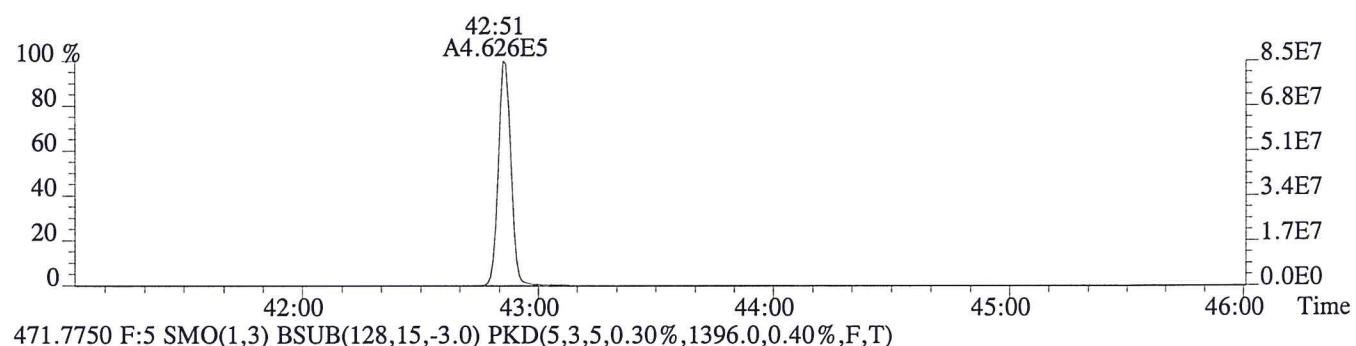
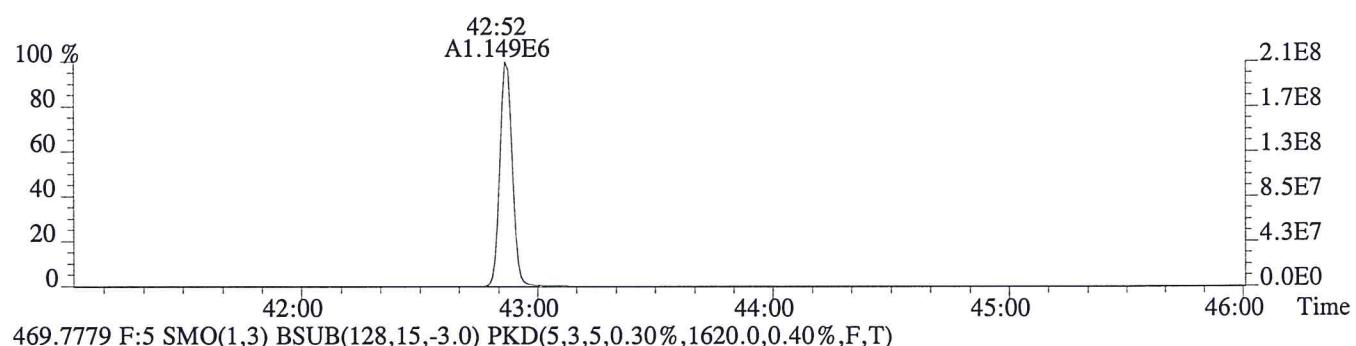
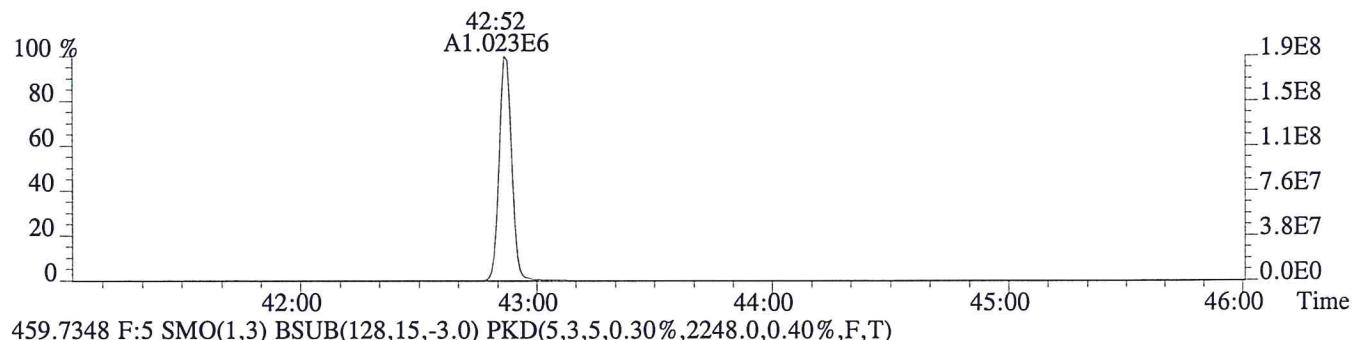
File:P600008 #1-213 Acq:19-AUG-2015 15:47:35 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:CS4  
 423.7766 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1972.0,0.40%,F,T)



File:P600008 #1-448 Acq:19-AUG-2015 15:47:35 Probe EI+ Magnet SIR VG BioTech Mass spect&  
 Sample#1 Exp:CS4  
 441.7428 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1332.0,0.40%,F,T)



File:P600008 #1-448 Acq:19-AUG-2015 15:47:35 Probe EI+ Magnet SIR VG BioTech Mass spect&  
Sample#1 Exp:CS4  
457.7377 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1168.0,0.40%,F,T)



ALS ENVIRONMENTAL  
Sample Response Summary

CLIENT ID.  
76956

Run #6      Filename P600009      Samp: 1      Inj: 1      Acquired: 19-AUG-15 16:36:39  
Processed: 20-AUG-15 08:56:30      Sample ID: CS5

Typ	Name	RT-1	Resp 1	Resp 2	Ratio	Meet	Mod?	RRF	
1	Unk	2,3,7,8-TCDF	29:04	5.698e+05	7.358e+05	0.77	yes	no	0.941
2	Unk	1,2,3,7,8-PeCDF	33:03	5.069e+06	3.368e+06	1.51	yes	no	0.987
3	Unk	2,3,4,7,8-PeCDF	33:55	4.895e+06	3.303e+06	1.48	yes	no	0.934
4	Unk	1,2,3,4,7,8-HxCDF	36:30	4.378e+06	3.792e+06	1.15	yes	no	1.189
5	Unk	1,2,3,6,7,8-HxCDF	36:37	4.614e+06	3.895e+06	1.18	yes	no	1.126
6	Unk	2,3,4,6,7,8-HxCDF	37:06	4.324e+06	3.774e+06	1.15	yes	no	1.116
7	Unk	1,2,3,7,8,9-HxCDF	37:50	4.202e+06	3.469e+06	1.21	yes	no	1.158
8	Unk	1,2,3,4,6,7,8-HpCDF	39:04	4.112e+06	4.014e+06	1.02	yes	no	1.373
9	Unk	1,2,3,4,7,8,9-HpCDF	40:30	3.888e+06	3.787e+06	1.03	yes	no	1.287
10	Unk	OCDF	43:05	5.424e+06	5.771e+06	0.94	yes	no	1.257
11	Unk	2,3,7,8-TCDD	29:48	5.437e+05	7.011e+05	0.78	yes	no	1.010
12	Unk	1,2,3,7,8-PeCDD	34:12	3.735e+06	2.401e+06	1.56	yes	no	0.932
13	Unk	1,2,3,4,7,8-HxCDD	37:14	3.464e+06	2.775e+06	1.25	yes	no	1.026
14	Unk	1,2,3,6,7,8-HxCDD	37:18	3.218e+06	2.567e+06	1.25	yes	no	1.021
15	Unk	1,2,3,7,8,9-HxCDD	37:32	3.598e+06	2.877e+06	1.25	yes	no	1.133
16	Unk	1,2,3,4,6,7,8-HpCDD	40:01	3.202e+06	3.074e+06	1.04	yes	no	1.034
17	Unk	OCDD	42:52	4.667e+06	5.176e+06	0.90	yes	no	1.111
18	IS	13C-2,3,7,8-TCDF	29:04	3.019e+05	3.824e+05	0.79	yes	no	1.379
19	IS	13C-1,2,3,7,8-PeCDF	33:03	5.165e+05	3.261e+05	1.58	yes	no	1.456
20	IS	13C-2,3,4,7,8-PeCDF	33:55	5.329e+05	3.377e+05	1.58	yes	no	1.465
21	IS	13C-1,2,3,4,7,8-HxCDF	36:30	2.330e+05	4.514e+05	0.52	yes	no	1.075
22	IS	13C-1,2,3,6,7,8-HxCDF	36:36	2.592e+05	4.960e+05	0.52	yes	no	1.158
23	IS	13C-2,3,4,6,7,8-HxCDF	37:05	2.509e+05	4.802e+05	0.52	yes	no	1.133
24	IS	13C-1,2,3,7,8,9-HxCDF	37:50	2.239e+05	4.271e+05	0.52	yes	no	1.024
25	IS	13C-1,2,3,4,6,7,8-HpCDF	39:03	1.807e+05	4.047e+05	0.45	yes	no	0.880
26	IS	13C-1,2,3,4,7,8,9-HpCDF	40:29	1.815e+05	4.093e+05	0.44	yes	no	0.914
27	IS	13C-2,3,7,8-TCDD	29:48	2.709e+05	3.451e+05	0.79	yes	no	1.193
28	IS	13C-1,2,3,7,8-PeCDD	34:11	3.952e+05	2.519e+05	1.57	yes	no	1.094
29	IS	13C-1,2,3,4,7,8-HxCDD	37:13	3.311e+05	2.621e+05	1.26	yes	no	0.906
30	IS	13C-1,2,3,6,7,8-HxCDD	37:18	3.070e+05	2.433e+05	1.26	yes	no	0.860
31	IS	13C-1,2,3,4,6,7,8-HpCDD	40:00	3.096e+05	2.924e+05	1.06	yes	no	0.892
32	IS	13C-OCDD	42:52	4.253e+05	4.724e+05	0.90	yes	no	0.642
33	RS/RT	13C-1,2,3,4-TCDD	29:15	2.161e+05	2.739e+05	0.79	yes	no	-
34	RS/RT	13C-1,2,3,7,8,9-HxCDD	37:32	3.579e+05	2.852e+05	1.25	yes	no	-
35	C/Up	37Cl-2,3,7,8-TCDD	29:48	1.300e+06				no	1.263

---

ALS ENVIRONMENTAL  
10450 Stancliff Rd, Suite 115  
Houston, TX 77099  
Office (713) 266-1599. Fax (713) 266-0130

[www.alsglobal.com](http://www.alsglobal.com)

ALS ENVIRONMENTAL  
Signal/Noise Height Ratio Summary

CLIENT ID.  
76956

Run #6   Filename P600009              Samp: 1    Inj: 1              Acquired: 19-AUG-15 16:36:39  
Processed: 20-AUG-15 08:56:30              LAB. ID: CS5

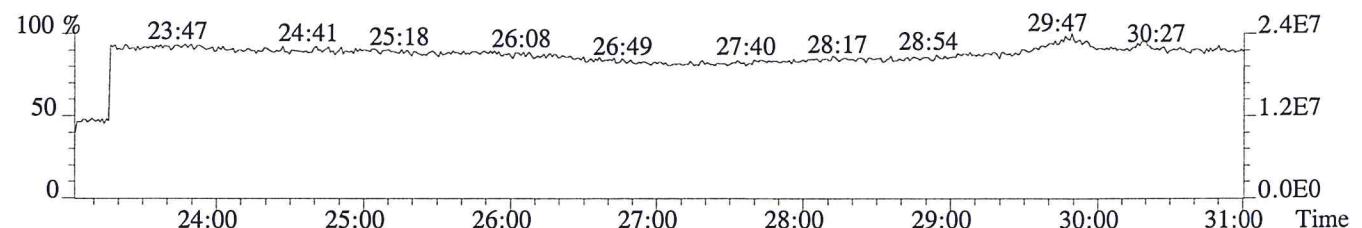
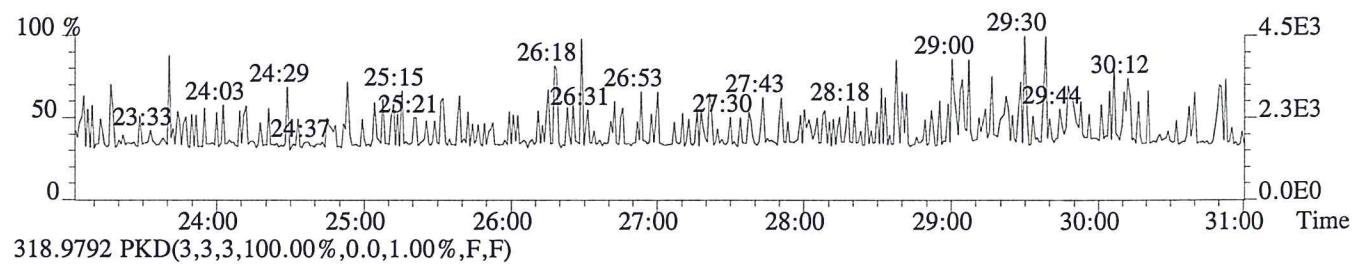
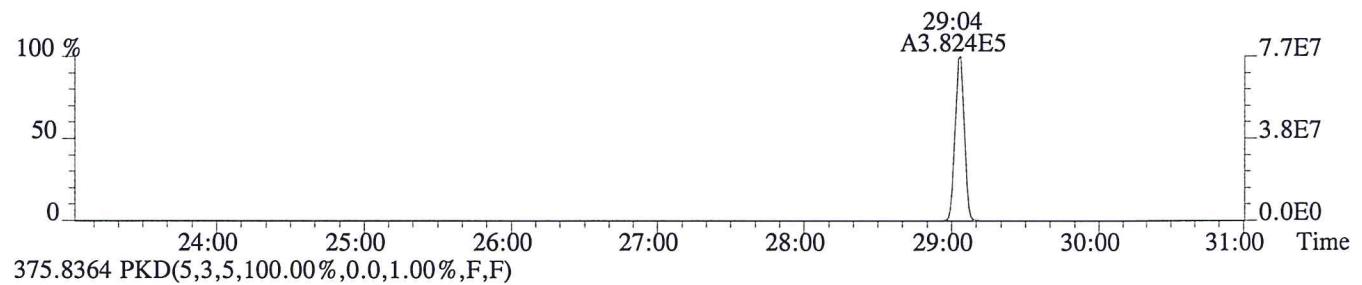
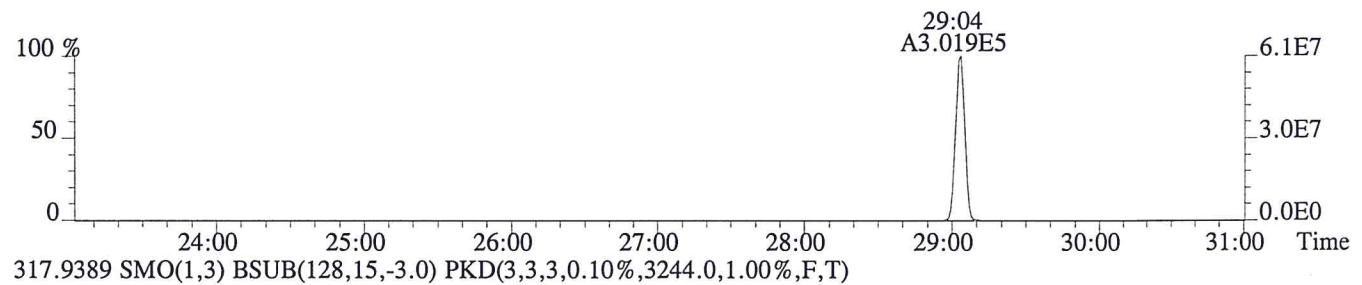
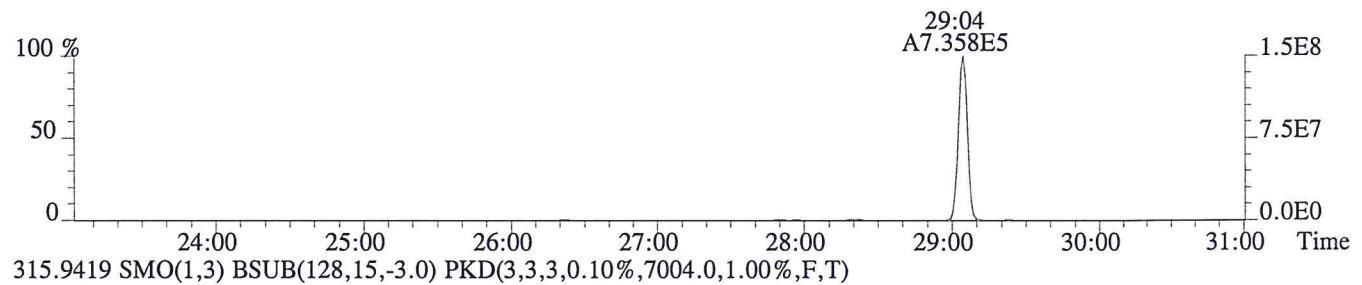
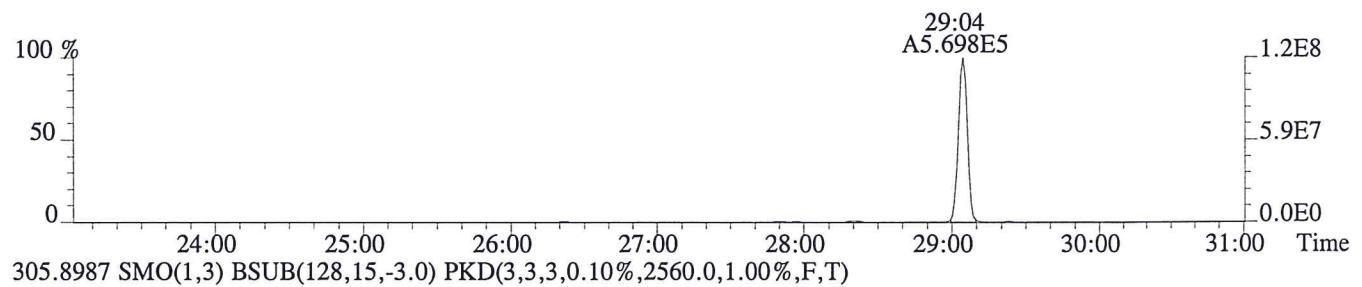
	Name	Signal 1	Noise 1	S/N Rat.1	Signal 2	Noise 2	S/N Rat.2
--	------	----------	---------	-----------	----------	---------	-----------

1	2,3,7,8-TCDF	1.17e+08	1.82e+03	6.4e+04	1.51e+08	2.56e+03	5.9e+04
2	1,2,3,7,8-PeCDF	1.04e+09	4.22e+03	2.5e+05	7.01e+08	3.35e+03	2.1e+05
3	2,3,4,7,8-PeCDF	1.05e+09	4.22e+03	2.5e+05	7.21e+08	3.35e+03	2.2e+05
4	1,2,3,4,7,8-HxCDF	9.69e+08	4.94e+03	2.0e+05	8.70e+08	1.94e+03	4.5e+05
5	1,2,3,6,7,8-HxCDF	1.05e+09	4.94e+03	2.1e+05	9.13e+08	1.94e+03	4.7e+05
6	2,3,4,6,7,8-HxCDF	9.97e+08	4.94e+03	2.0e+05	9.00e+08	1.94e+03	4.6e+05
7	1,2,3,7,8,9-HxCDF	9.56e+08	4.94e+03	1.9e+05	7.83e+08	1.94e+03	4.0e+05
8	1,2,3,4,6,7,8-HpCDF	9.41e+08	7.45e+04	1.3e+04	9.27e+08	6.28e+04	1.5e+04
9	1,2,3,4,7,8,9-HpCDF	8.46e+08	7.45e+04	1.1e+04	8.25e+08	6.28e+04	1.3e+04
10	OCDF	1.02e+09	1.29e+03	7.9e+05	1.03e+09	2.48e+03	4.1e+05
11	2,3,7,8-TCDD	1.16e+08	2.61e+03	4.4e+04	1.50e+08	2.32e+03	6.5e+04
12	1,2,3,7,8-PeCDD	8.04e+08	3.48e+03	2.3e+05	5.13e+08	2.10e+03	2.4e+05
13	1,2,3,4,7,8-HxCDD	8.19e+08	1.94e+03	4.2e+05	6.51e+08	1.46e+03	4.5e+05
14	1,2,3,6,7,8-HxCDD	7.51e+08	1.94e+03	3.9e+05	6.07e+08	1.46e+03	4.2e+05
15	1,2,3,7,8,9-HxCDD	8.35e+08	1.94e+03	4.3e+05	6.74e+08	1.46e+03	4.6e+05
16	1,2,3,4,6,7,8-HpCDD	6.97e+08	1.48e+04	4.7e+04	6.63e+08	1.69e+04	3.9e+04
17	OCDD	8.88e+08	1.77e+03	5.0e+05	9.65e+08	1.72e+03	5.6e+05
18	13C-2,3,7,8-TCDF	6.06e+07	7.00e+03	8.7e+03	7.67e+07	3.24e+03	2.4e+04
19	13C-1,2,3,7,8-PeCDF	1.07e+08	2.01e+03	5.3e+04	6.70e+07	3.20e+03	2.1e+04
20	13C-2,3,4,7,8-PeCDF	1.14e+08	2.01e+03	5.7e+04	7.23e+07	3.20e+03	2.3e+04
21	13C-1,2,3,4,7,8-HxCDF	5.21e+07	1.12e+03	4.6e+04	1.02e+08	3.30e+03	3.1e+04
22	13C-1,2,3,6,7,8-HxCDF	6.00e+07	1.12e+03	5.4e+04	1.16e+08	3.30e+03	3.5e+04
23	13C-2,3,4,6,7,8-HxCDF	5.82e+07	1.12e+03	5.2e+04	1.13e+08	3.30e+03	3.4e+04
24	13C-1,2,3,7,8,9-HxCDF	5.08e+07	1.12e+03	4.5e+04	9.71e+07	3.30e+03	2.9e+04
25	13C-1,2,3,4,6,7,8-HpCDF	4.05e+07	5.44e+03	7.4e+03	9.21e+07	2.72e+03	3.4e+04
26	13C-1,2,3,4,7,8,9-HpCDF	3.89e+07	5.44e+03	7.1e+03	8.85e+07	2.72e+03	3.3e+04
27	13C-2,3,7,8-TCDD	5.82e+07	1.09e+04	5.3e+03	7.39e+07	4.66e+03	1.6e+04
28	13C-1,2,3,7,8-PeCDD	8.53e+07	2.62e+03	3.3e+04	5.47e+07	1.81e+03	3.0e+04
29	13C-1,2,3,4,7,8-HxCDD	7.80e+07	6.01e+03	1.3e+04	6.12e+07	3.18e+03	1.9e+04
30	13C-1,2,3,6,7,8-HxCDD	7.07e+07	6.01e+03	1.2e+04	5.69e+07	3.18e+03	1.8e+04
31	13C-1,2,3,4,6,7,8-HpCDD	6.58e+07	2.96e+03	2.2e+04	6.18e+07	2.63e+03	2.3e+04
32	13C-OCDD	8.04e+07	1.98e+03	4.1e+04	8.87e+07	1.82e+03	4.9e+04
33	13C-1,2,3,4-TCDD	4.39e+07	1.09e+04	4.0e+03	5.59e+07	4.66e+03	1.2e+04
34	13C-1,2,3,7,8,9-HxCDD	8.14e+07	6.01e+03	1.4e+04	6.56e+07	3.18e+03	2.1e+04
35	37Cl-2,3,7,8-TCDD	2.80e+08	3.21e+03	8.7e+04			

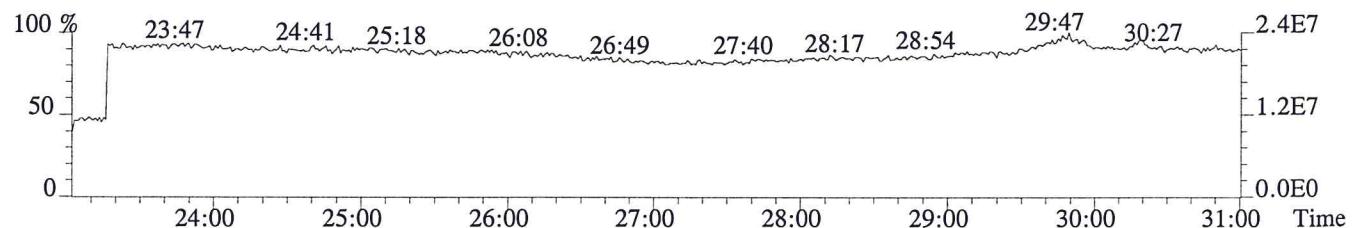
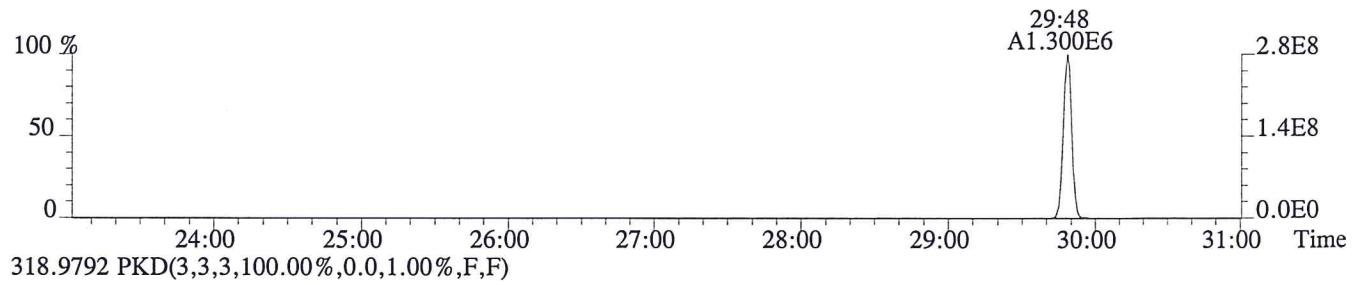
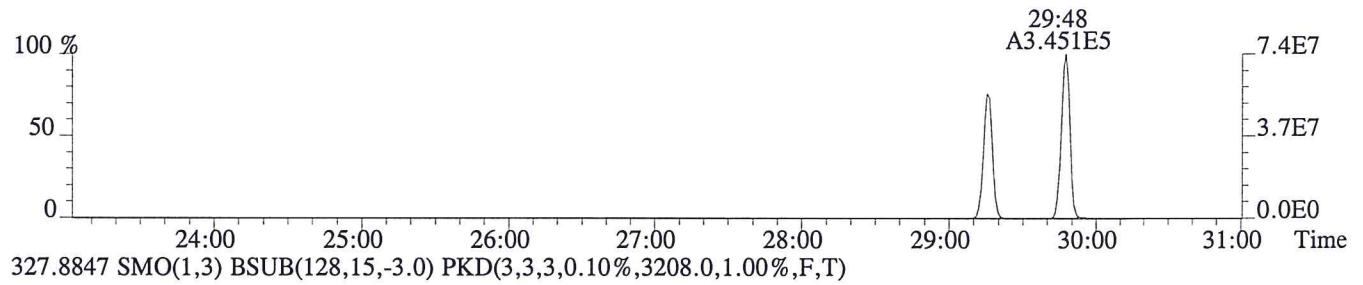
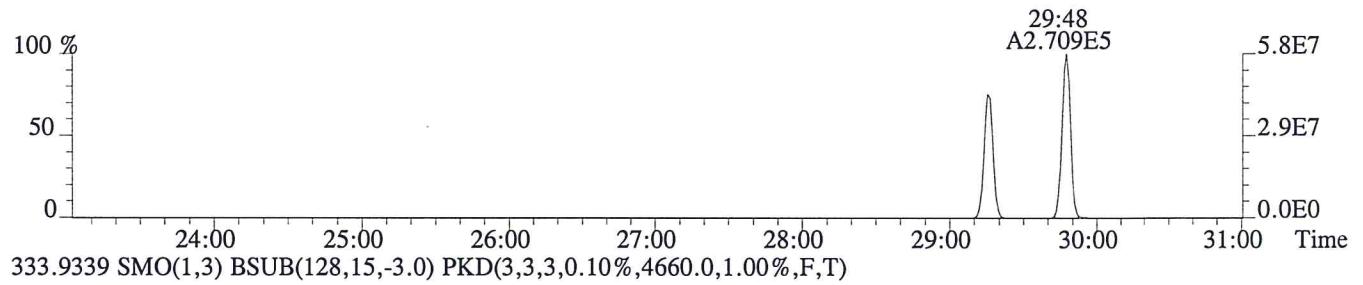
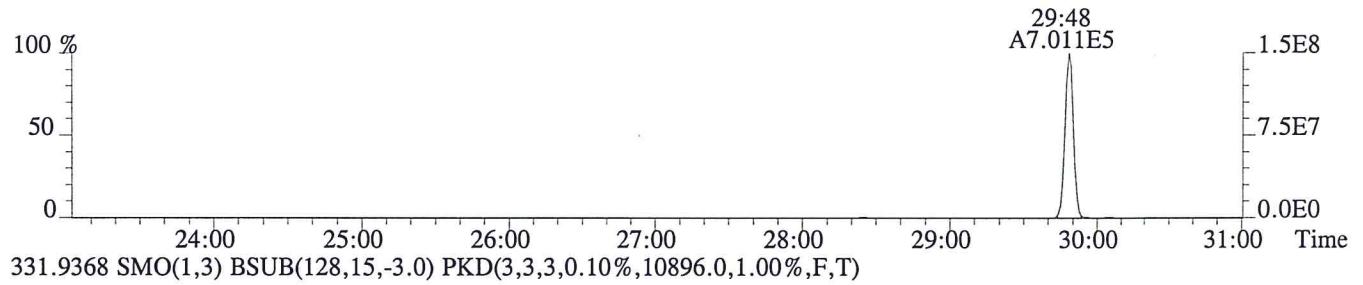
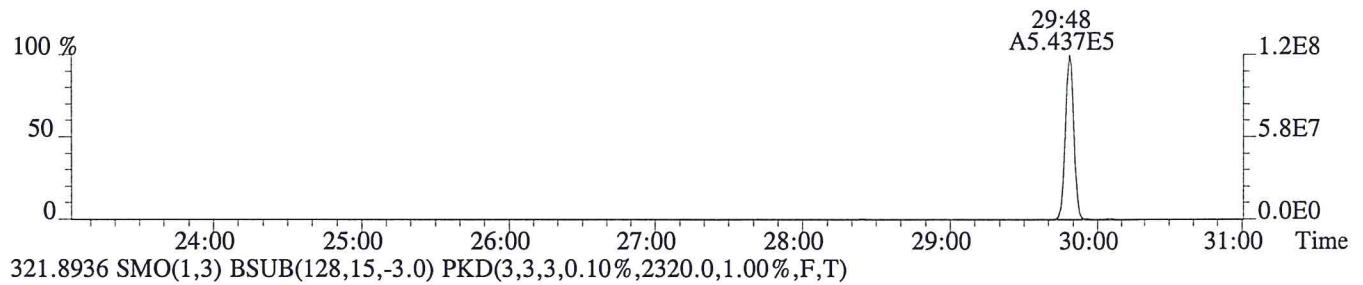
---

ALS ENVIRONMENTAL  
10450 Stancliff Rd., Suite 115  
Houston, TX 77099  
Office: (713) 266-1599. Fax: (713) 266-0130

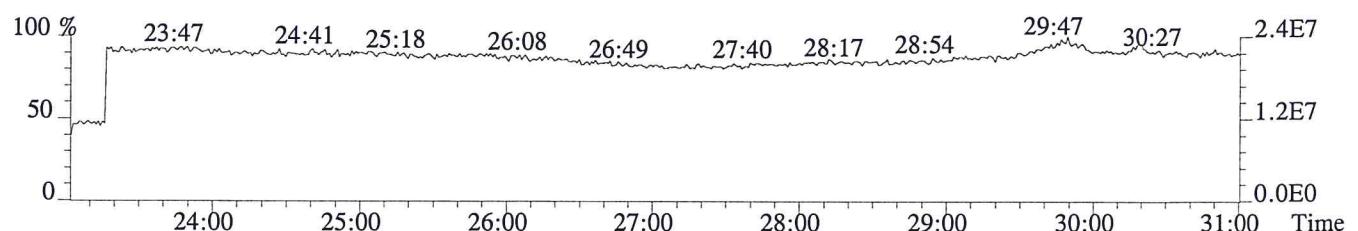
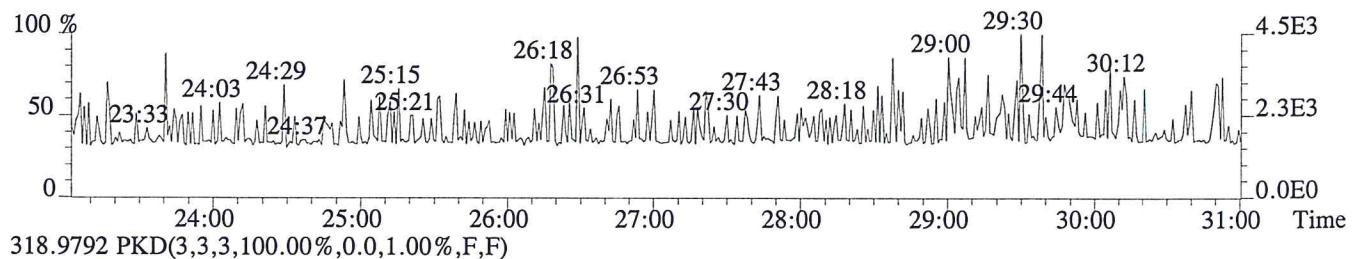
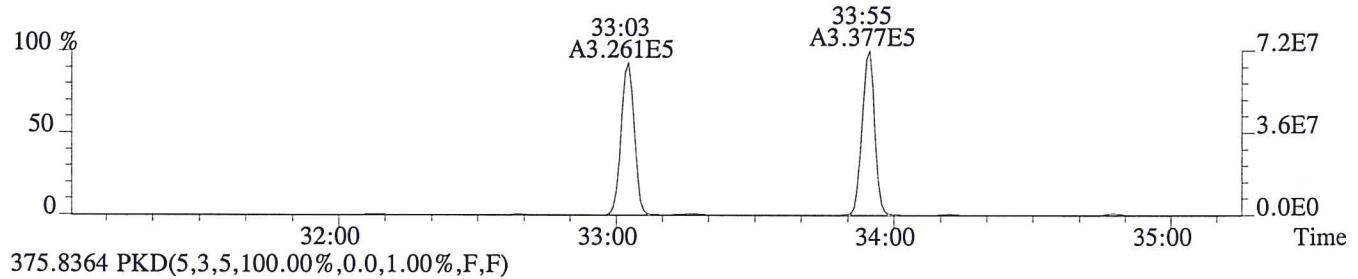
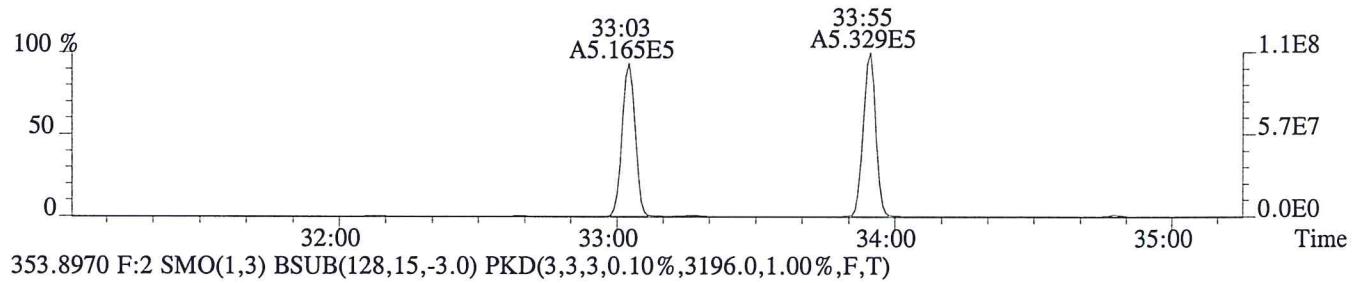
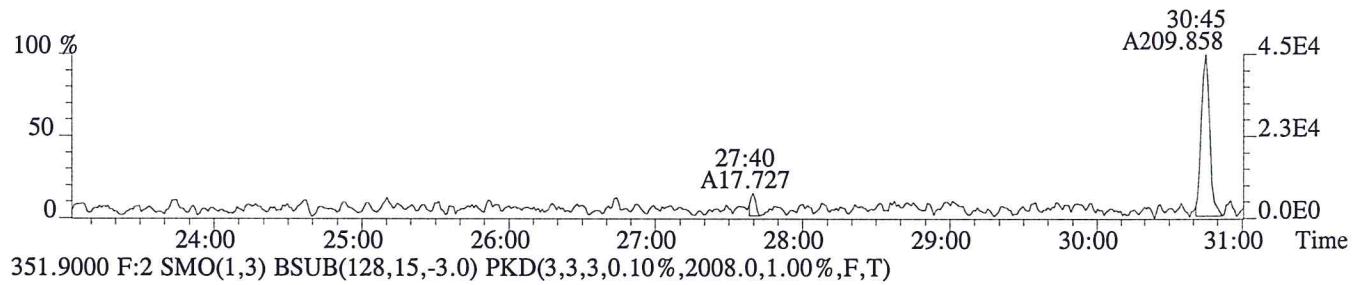
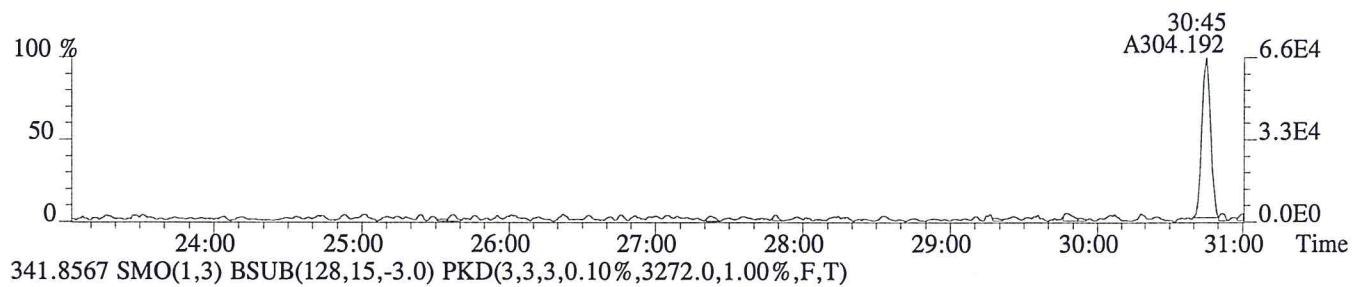
File:P600009 #1-566 Acq:19-AUG-2015 16:36:39 Probe EI+ Magnet SIR VG BioTech Mass spect&  
 Sample#1 Exp:CS5  
 303.9016 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1816.0,1.00%,F,T)



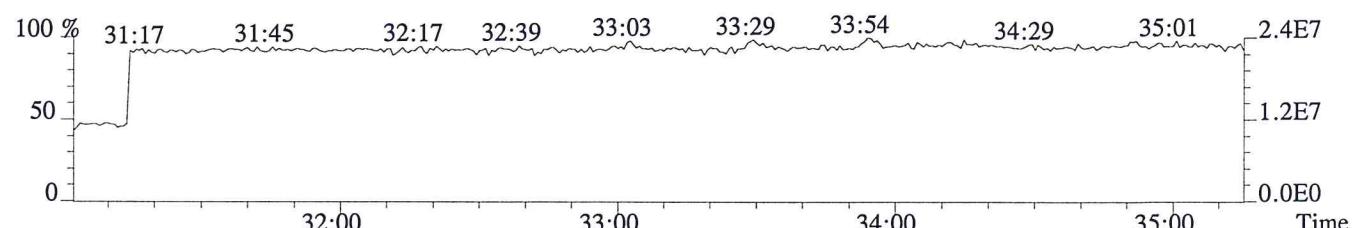
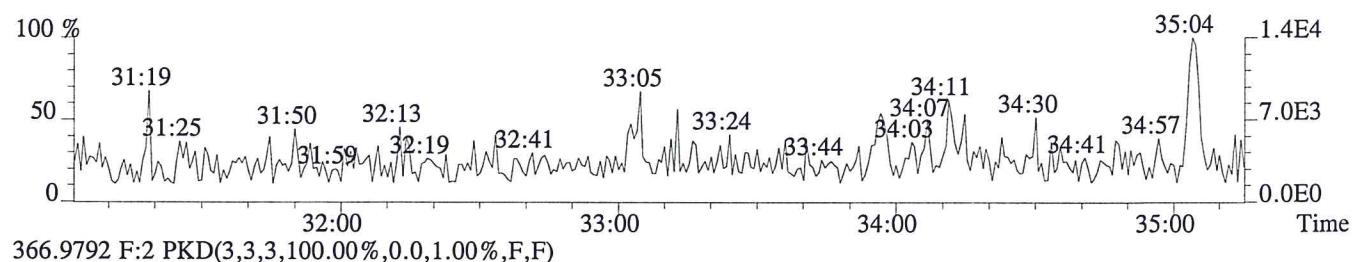
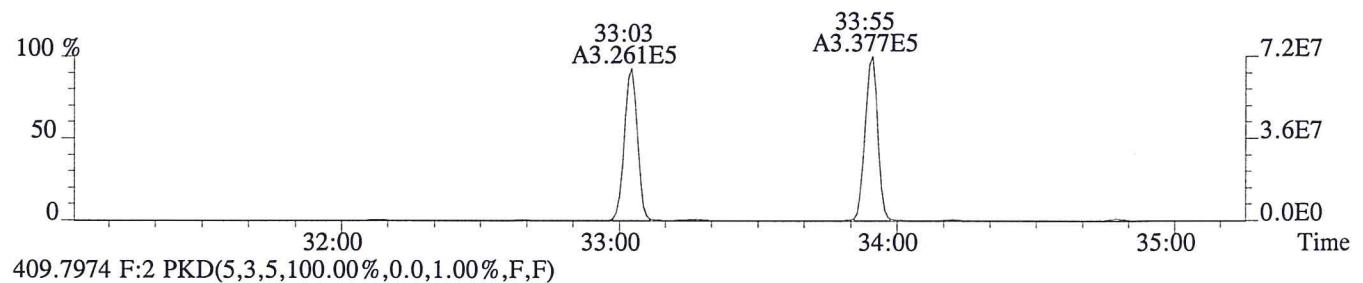
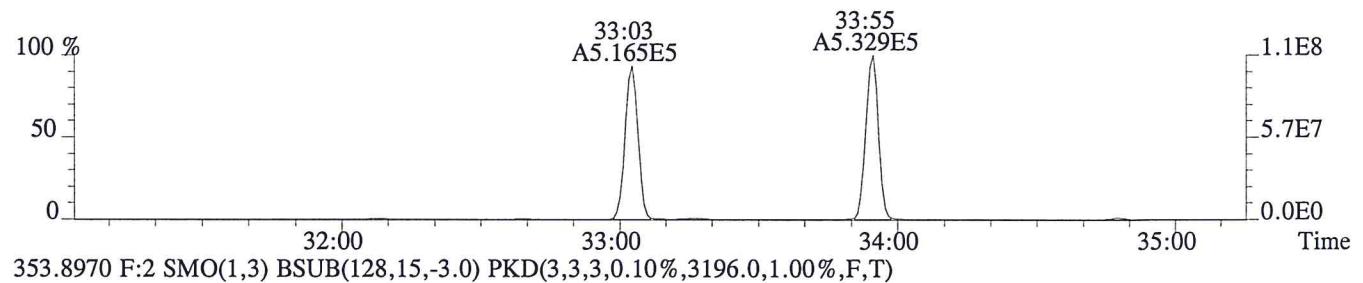
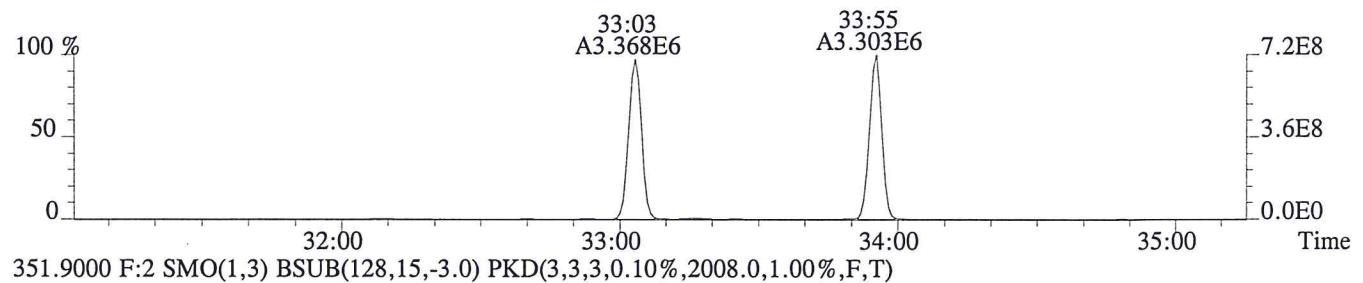
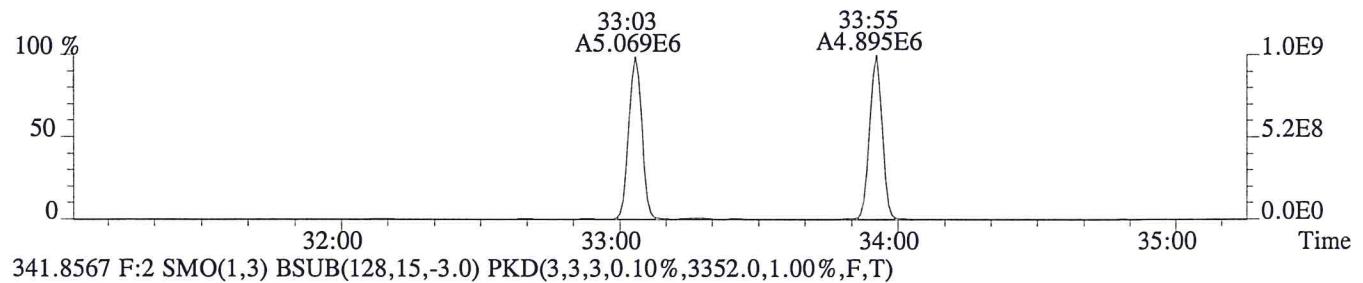
File:P600009 #1-566 Acq:19-AUG-2015 16:36:39 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:CS5  
 319.8965 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,2612.0,1.00%,F,T)



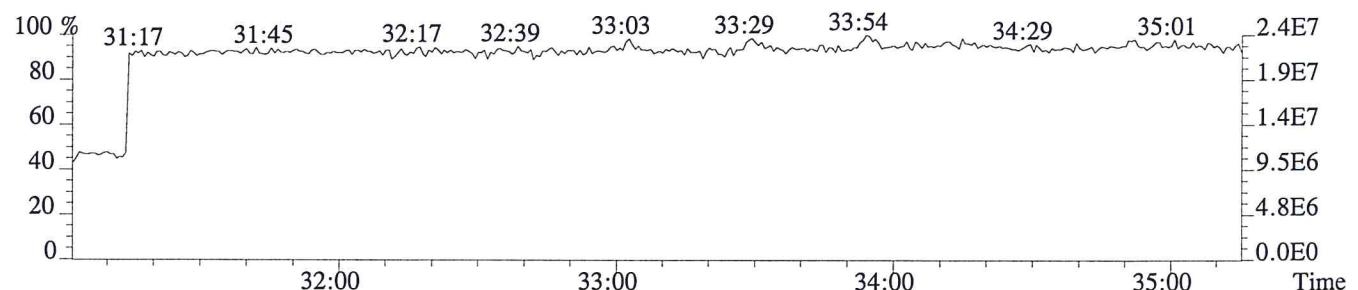
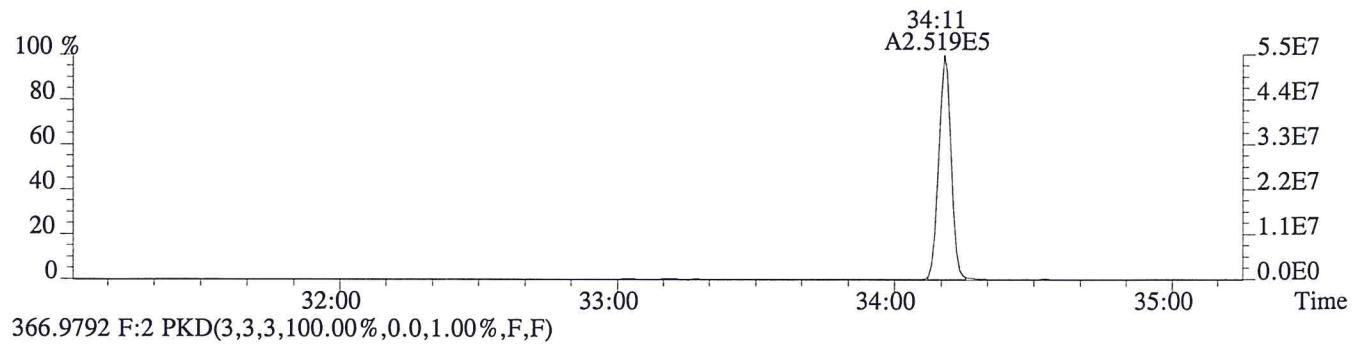
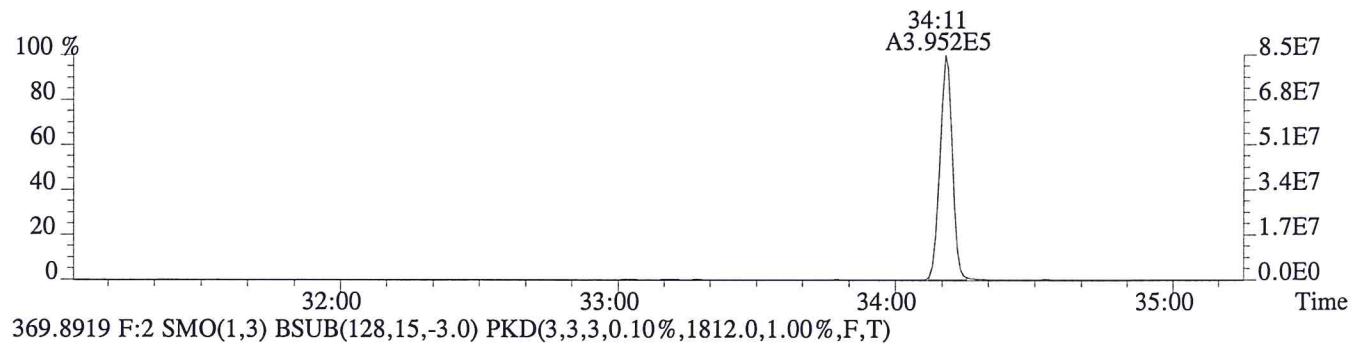
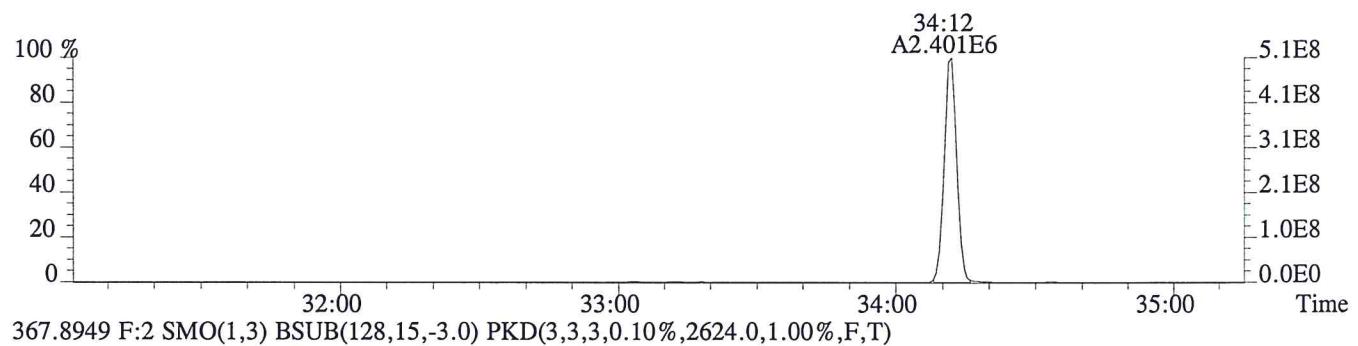
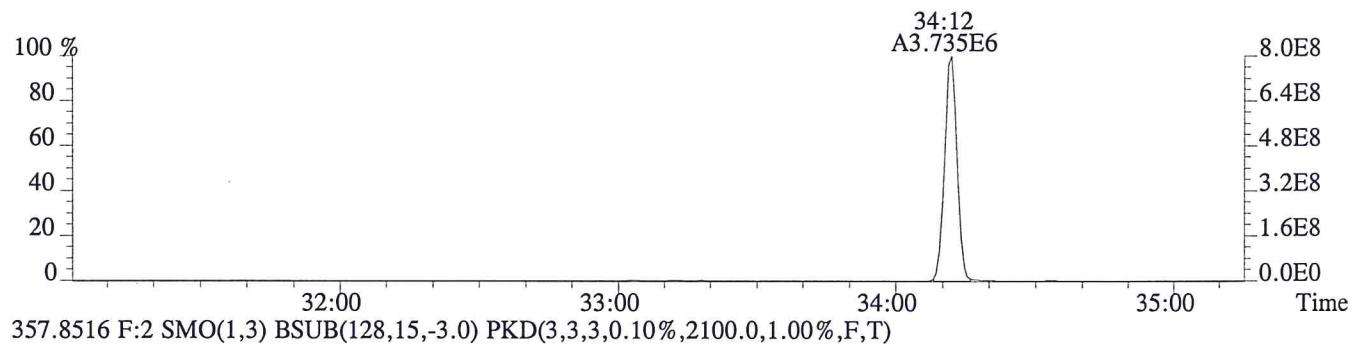
File:P600009 #1-566 Acq:19-AUG-2015 16:36:39 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:CS5  
 339.8597 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1568.0,1.00%,F,T)



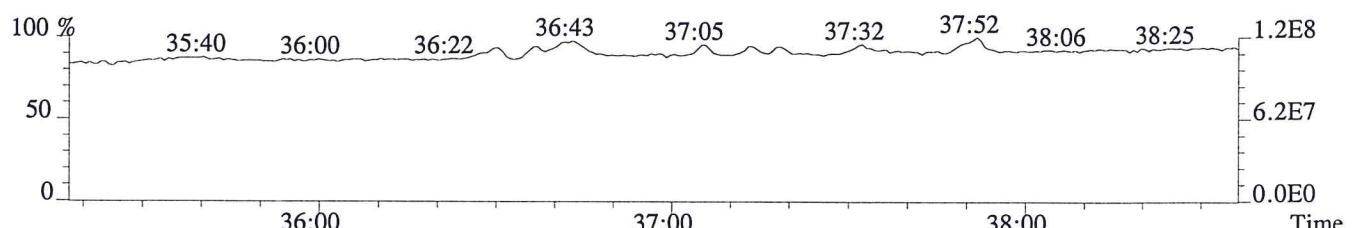
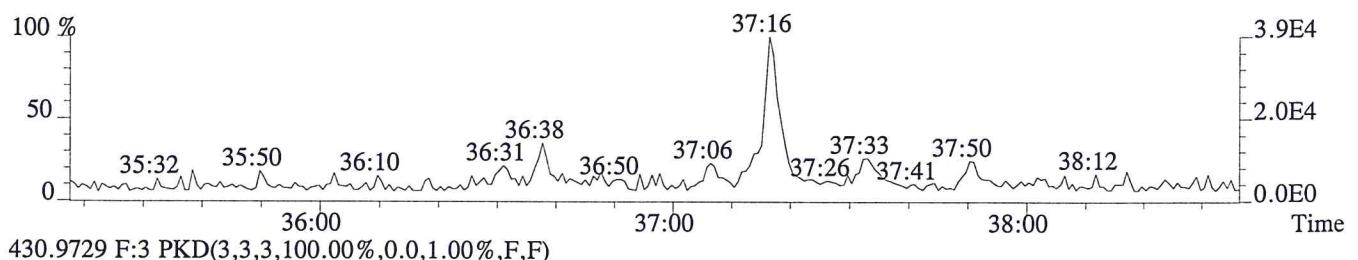
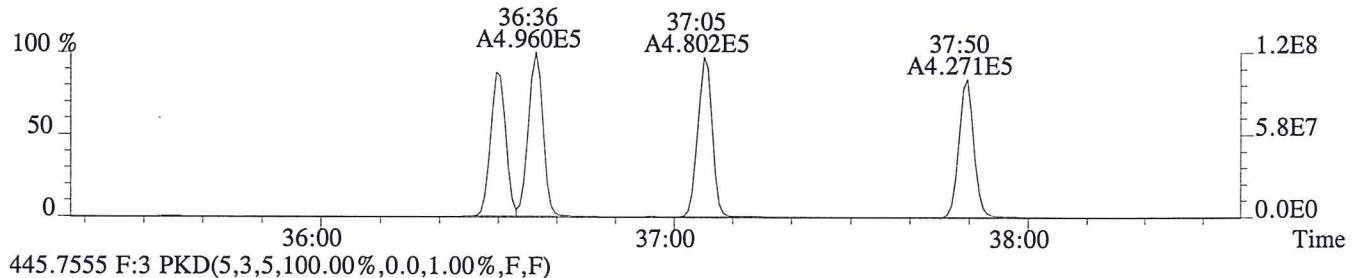
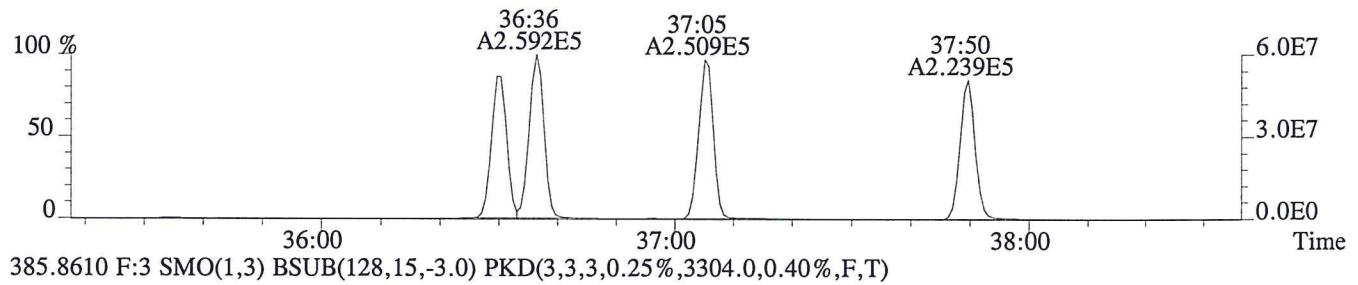
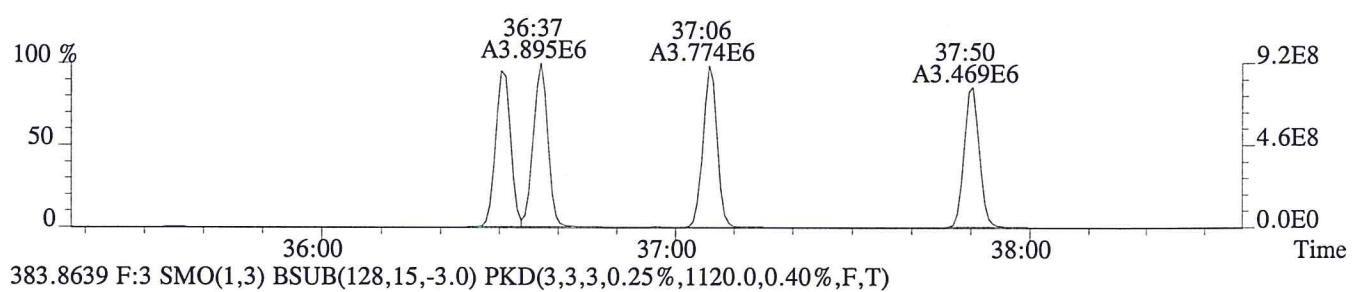
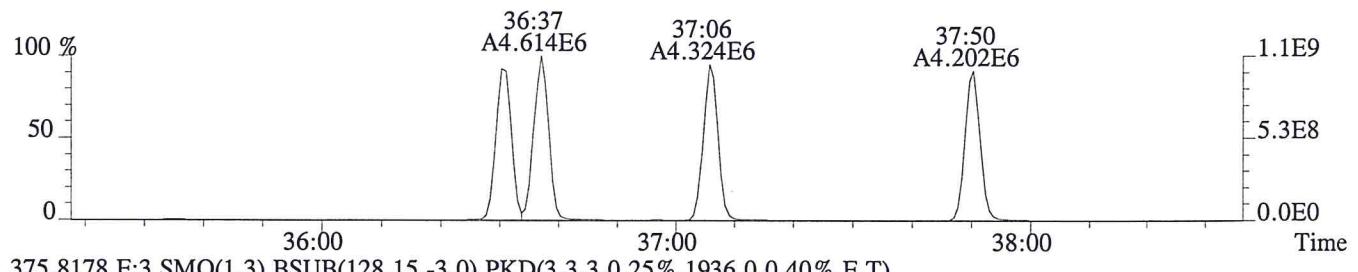
File:P600009 #1-380 Acq:19-AUG-2015 16:36:39 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:CS5  
 339.8597 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,4216.0,1.00%,F,T)



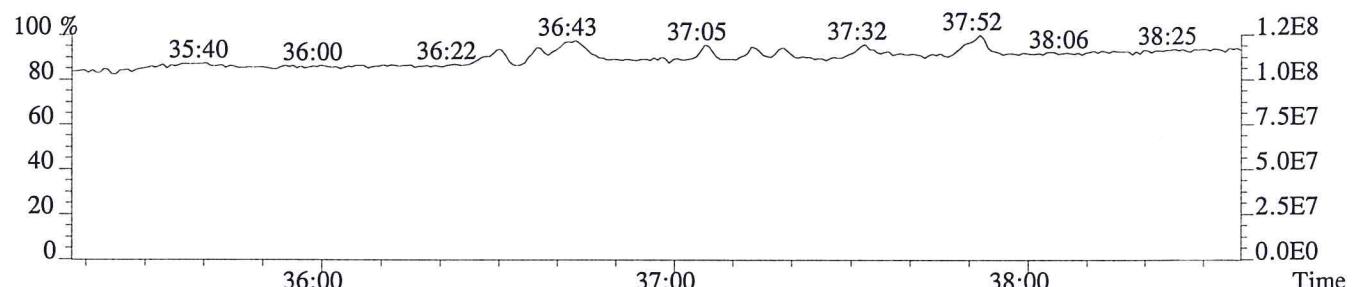
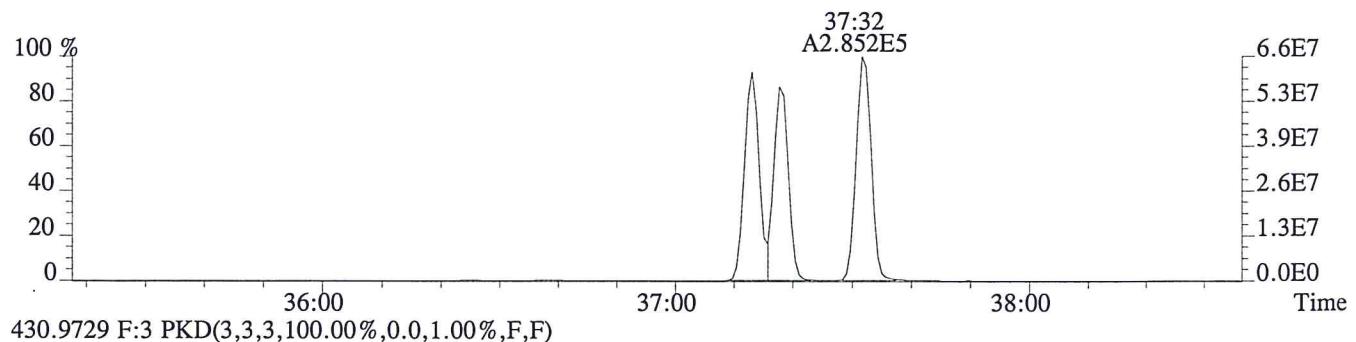
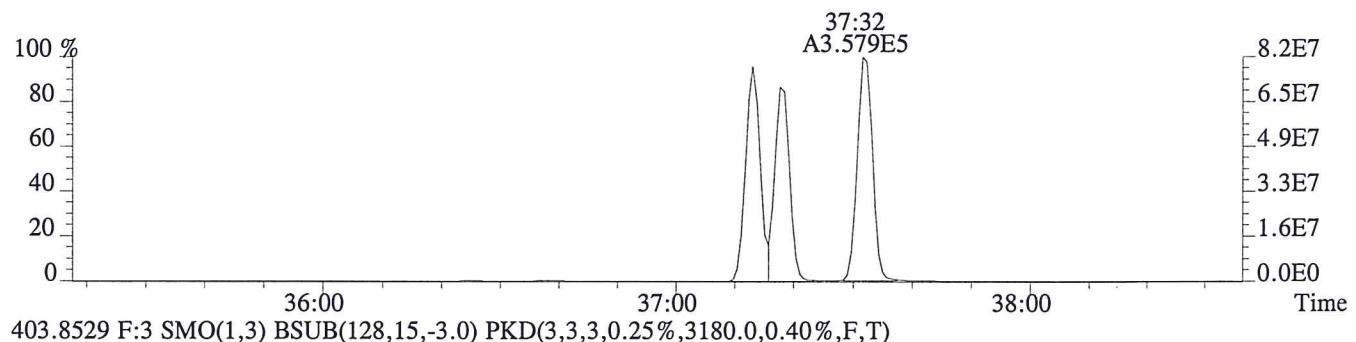
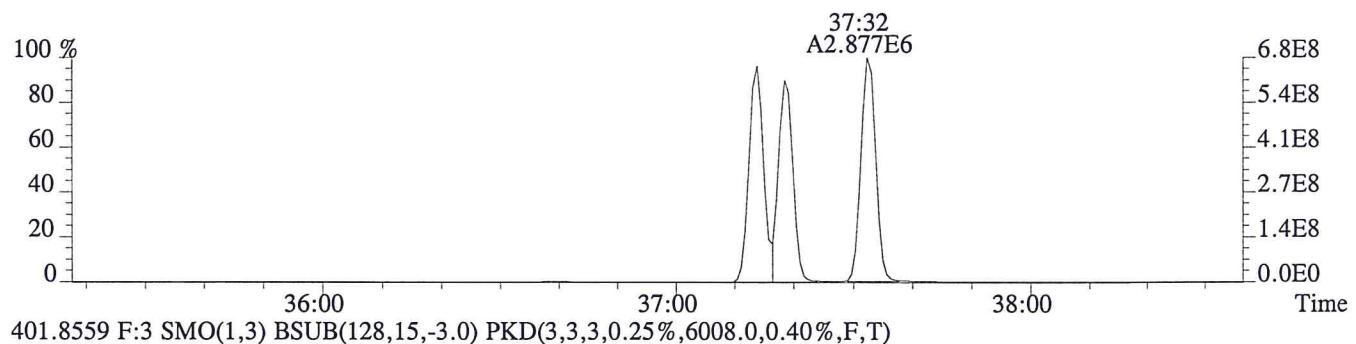
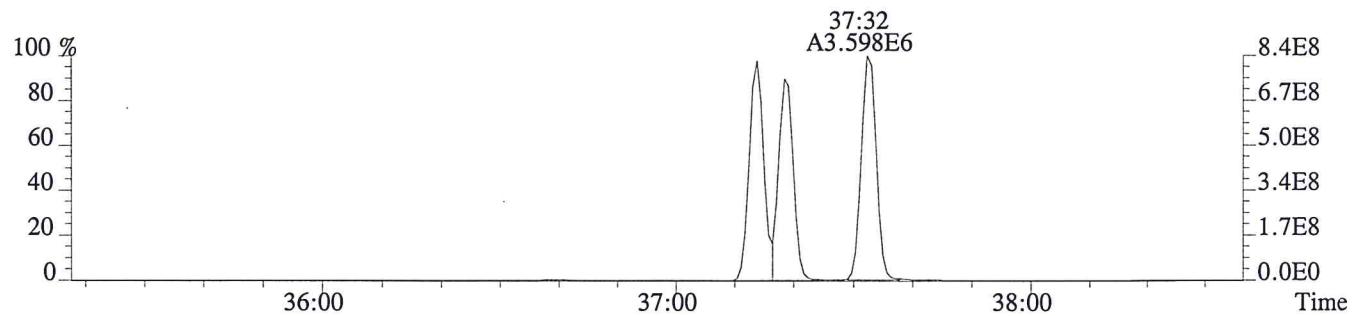
File:P600009 #1-380 Acq:19-AUG-2015 16:36:39 Probe EI+ Magnet SIR VG BioTech Mass spectf  
Sample#1 Exp:CS5  
355.8546 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,3476.0,1.00%,F,T)



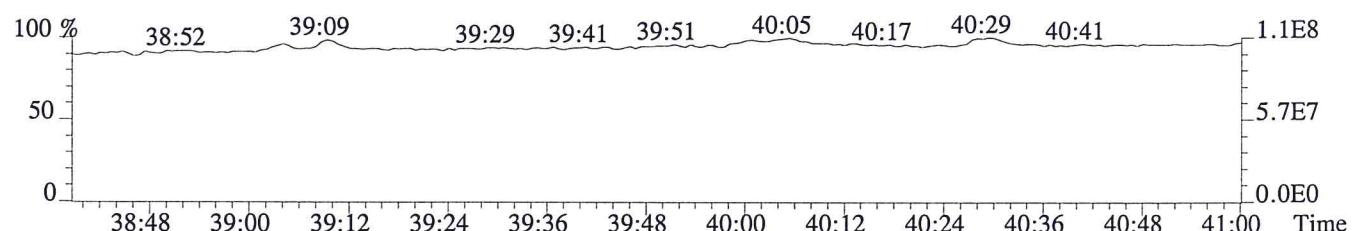
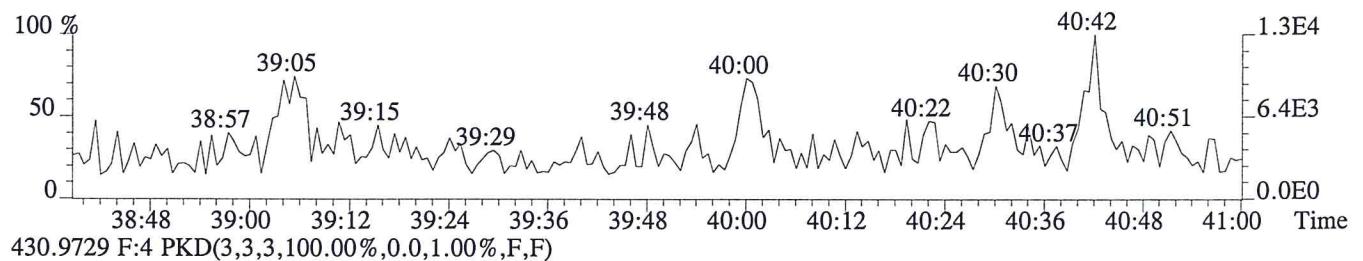
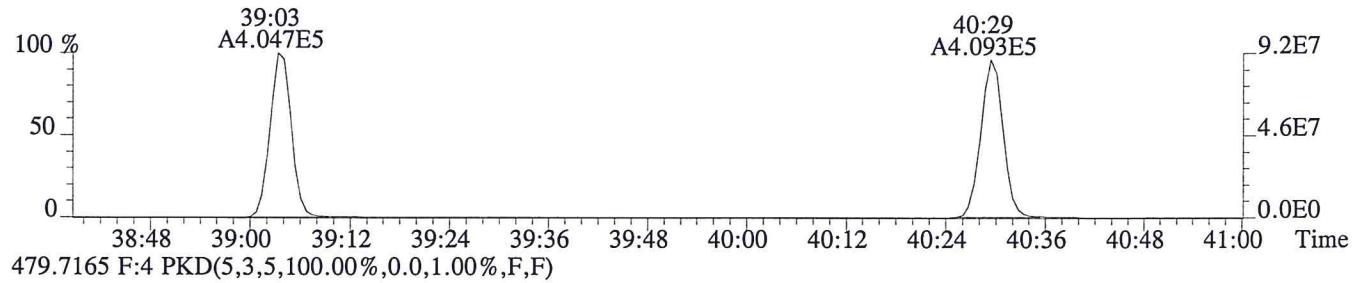
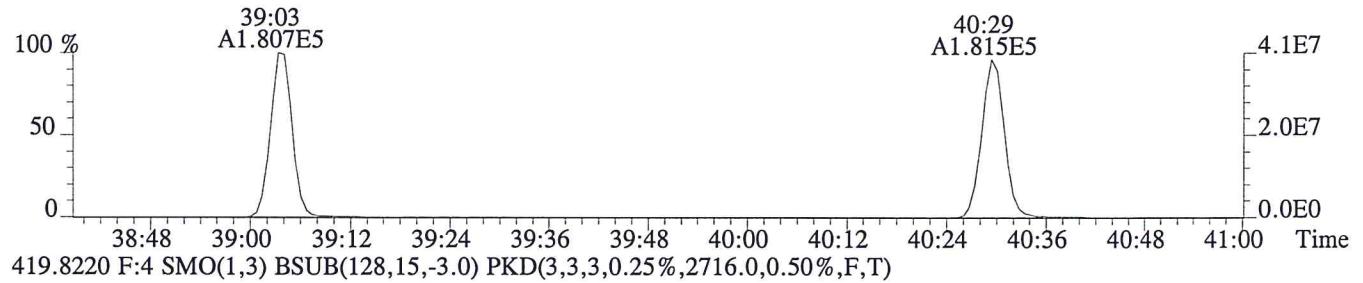
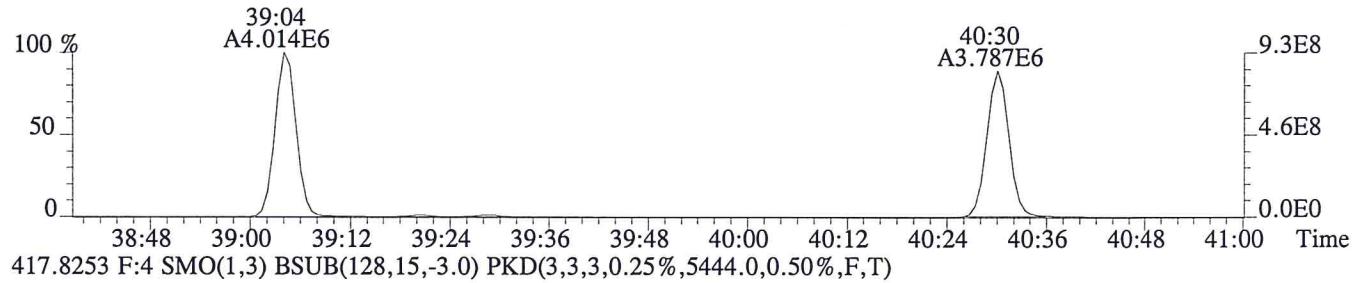
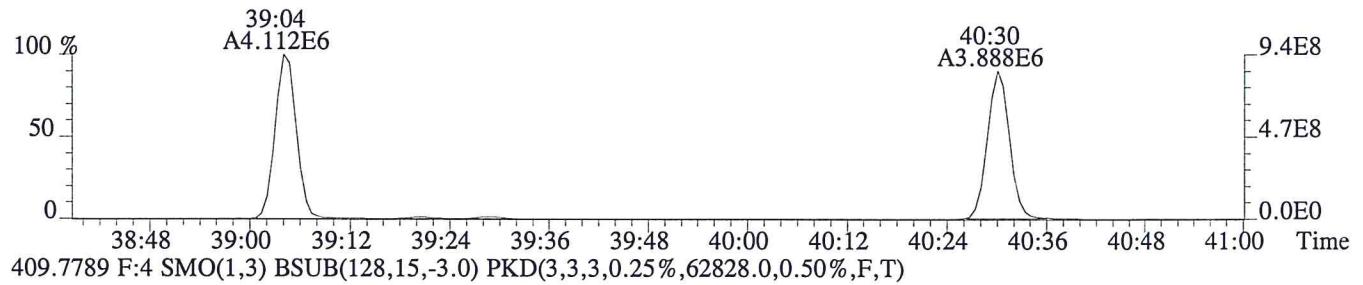
File:P600009 #1-299 Acq:19-AUG-2015 16:36:39 Probe EI+ Magnet SIR VG BioTech Mass spect<br/>Sample#1 Exp:CS5  
373.8208 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,4944.0,0.40%,F,T)



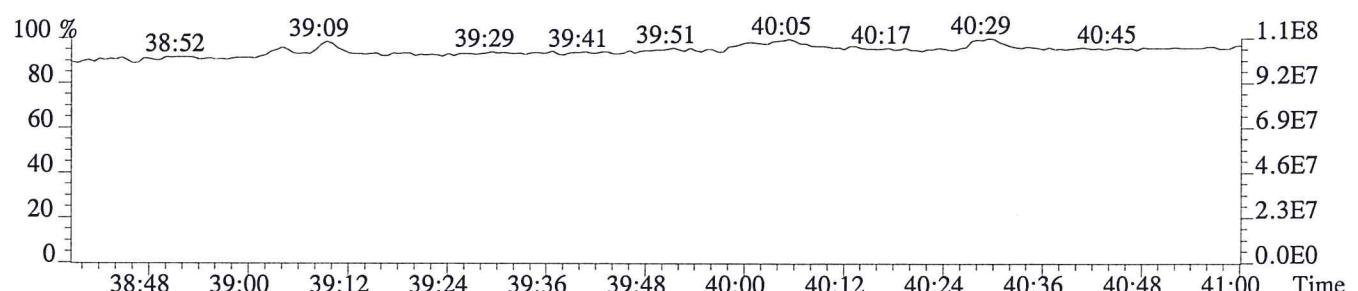
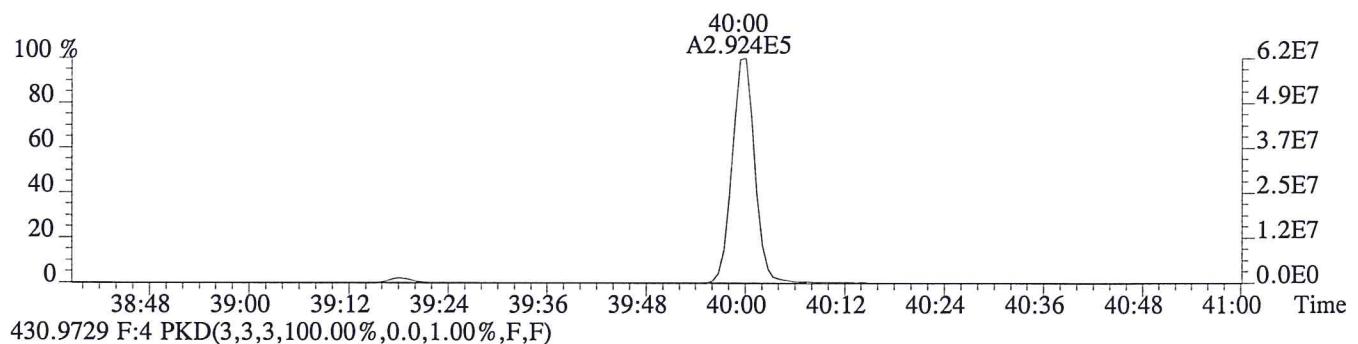
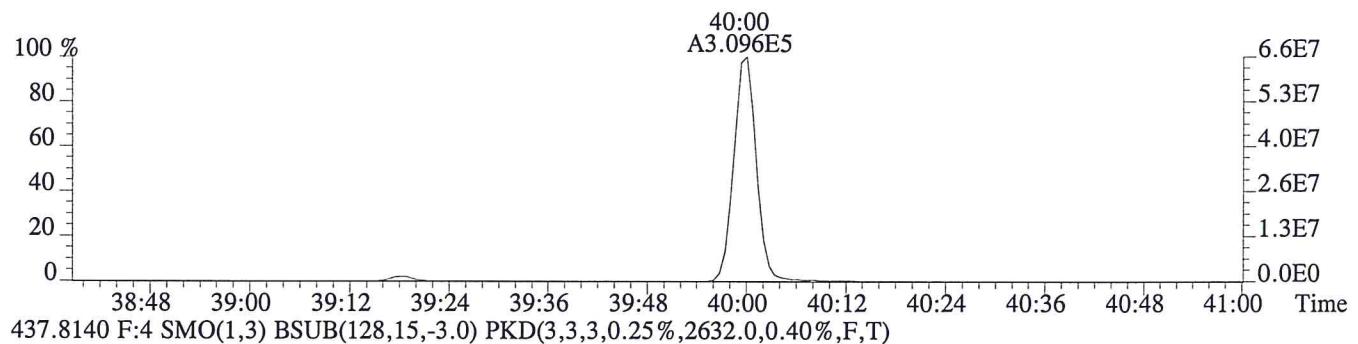
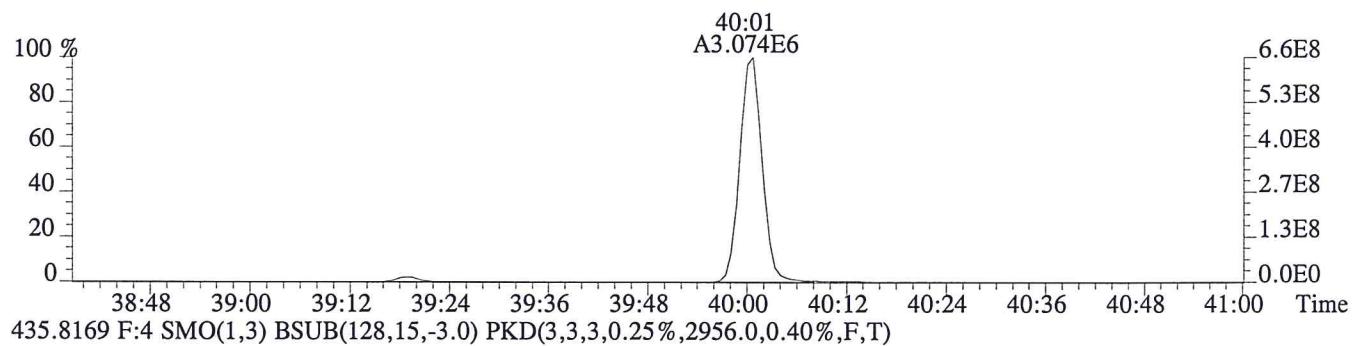
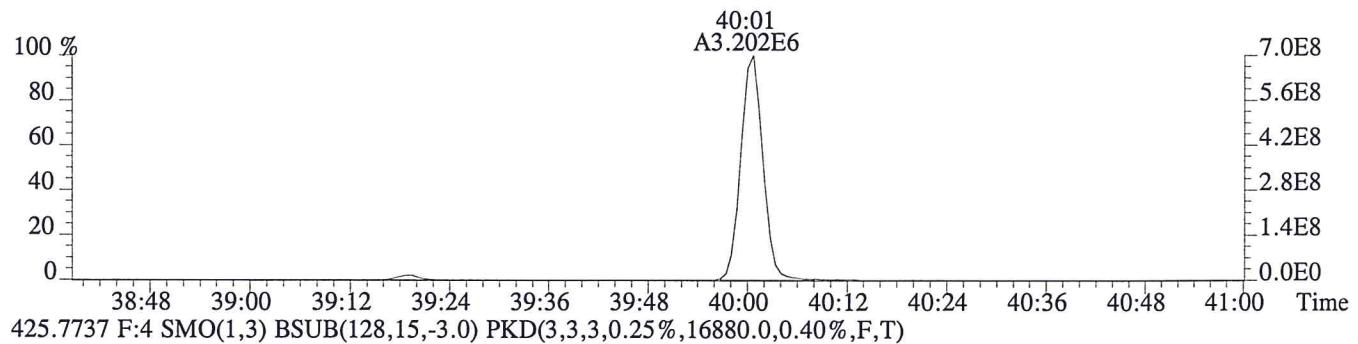
File:P600009 #1-299 Acq:19-AUG-2015 16:36:39 Probe EI+ Magnet SIR VG BioTech Mass spect<br/>Sample#1 Exp:CS5<br/>389.8157 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1936.0,0.40%,F,T)



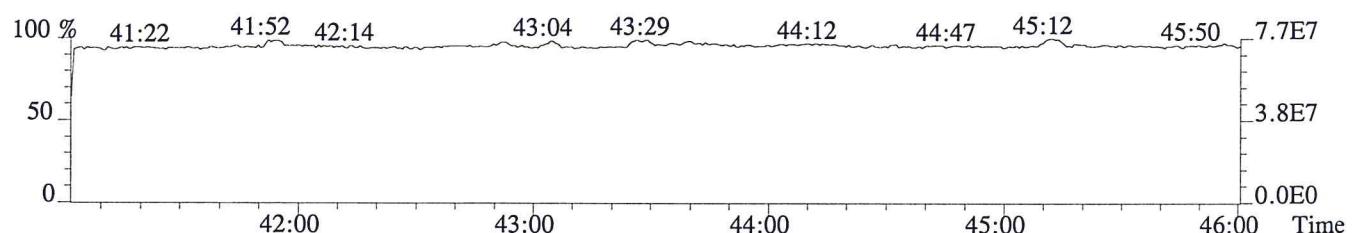
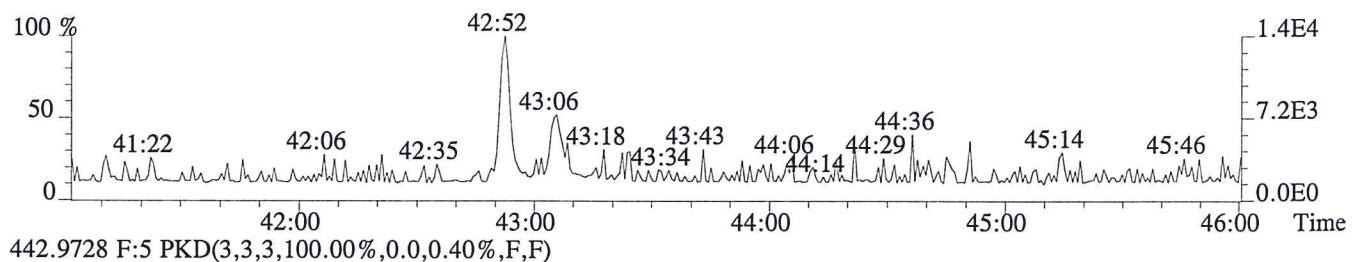
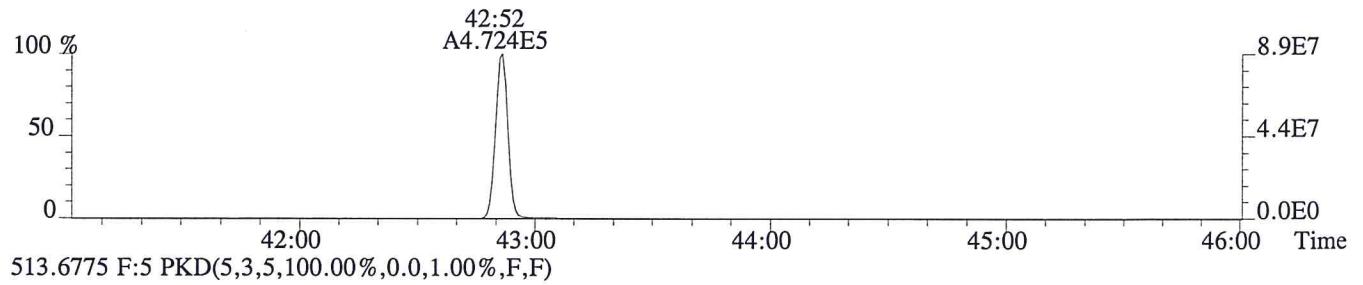
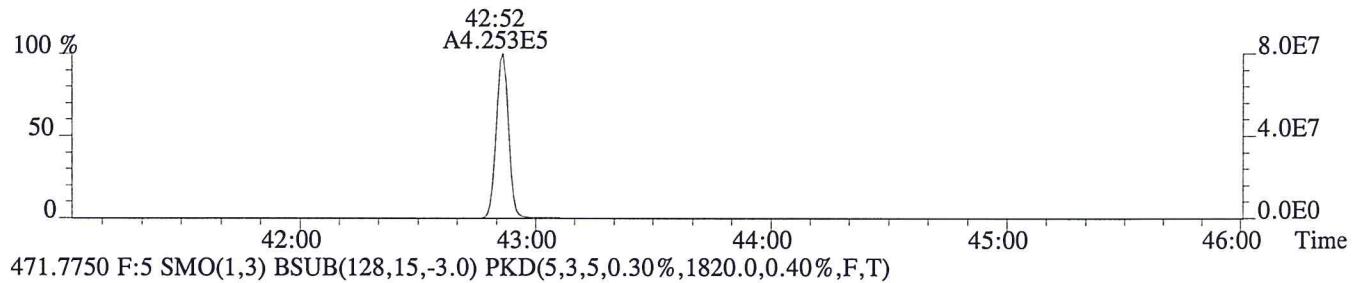
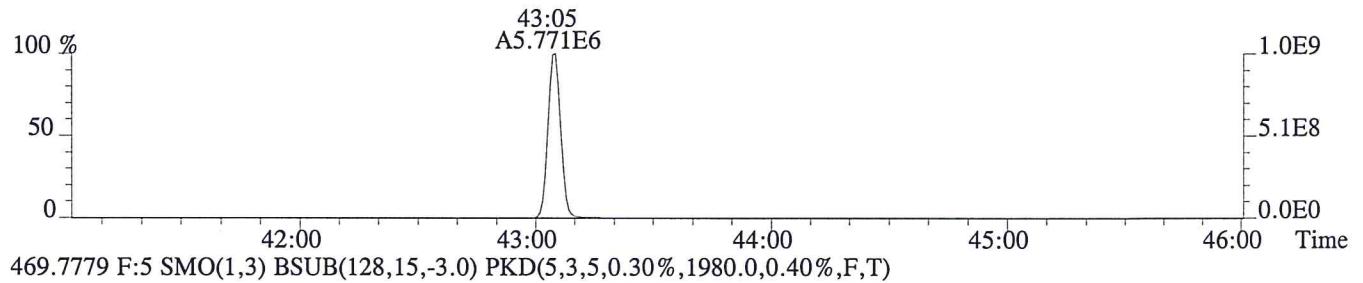
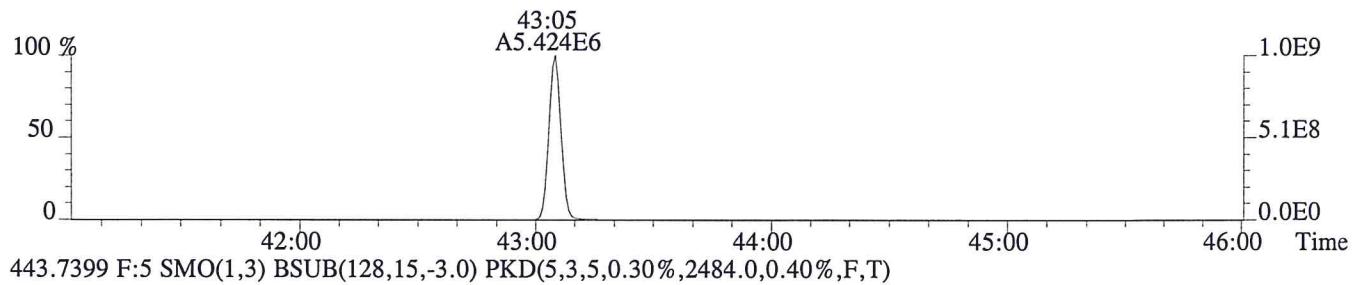
File:P600009 #1-213 Acq:19-AUG-2015 16:36:39 Probe EI+ Magnet SIR VG BioTech Mass spect&  
 Sample#1 Exp:CSS  
 407.7818 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,74492.0,0.50%,F,T)



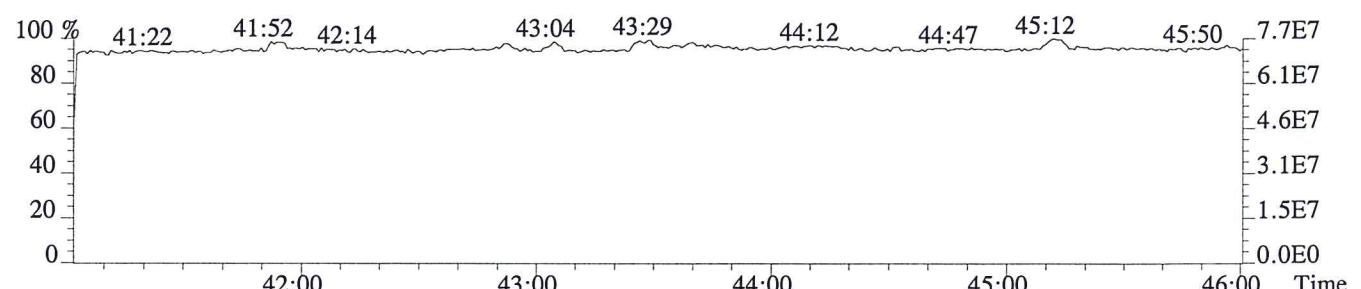
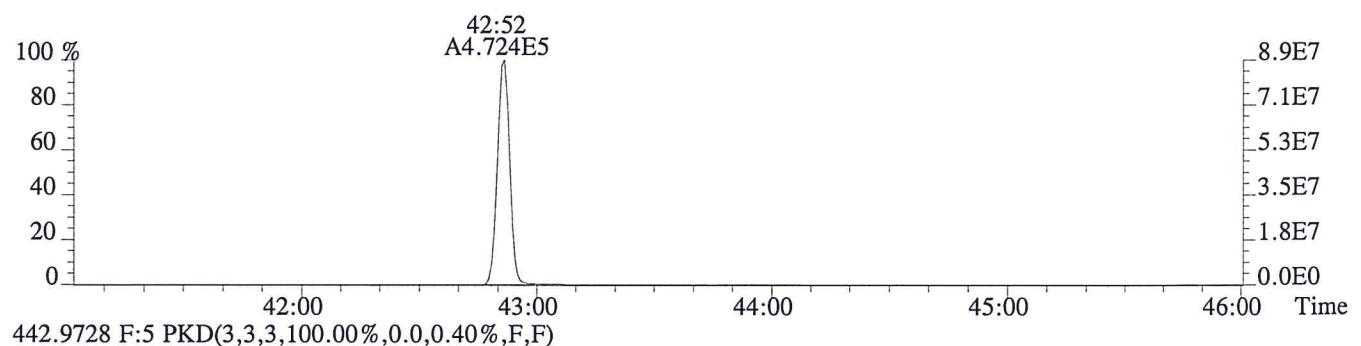
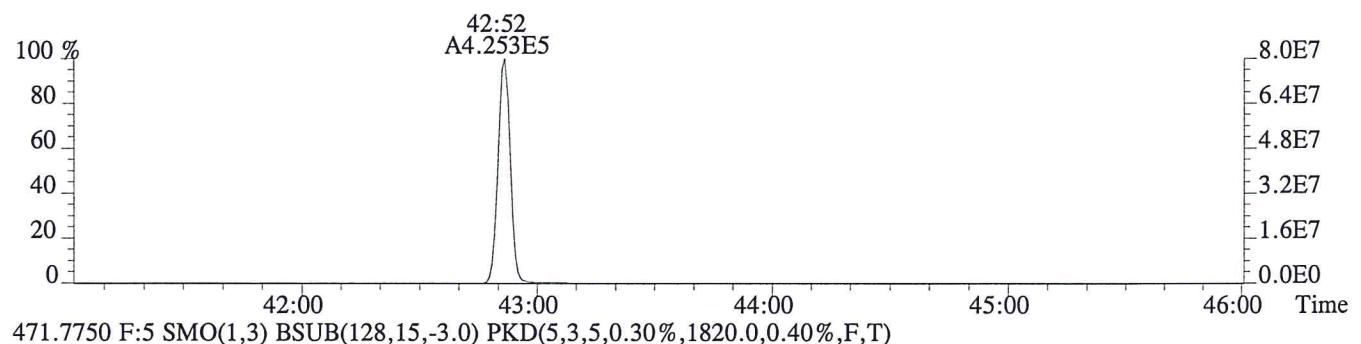
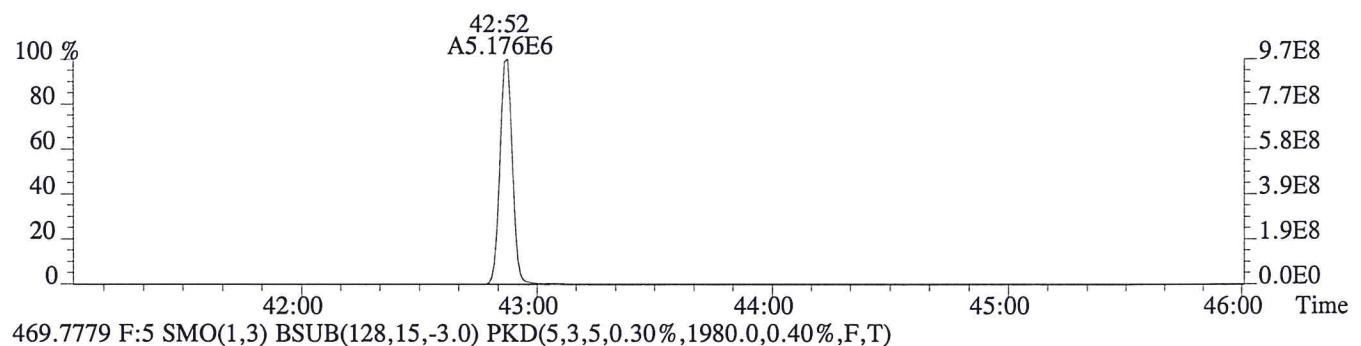
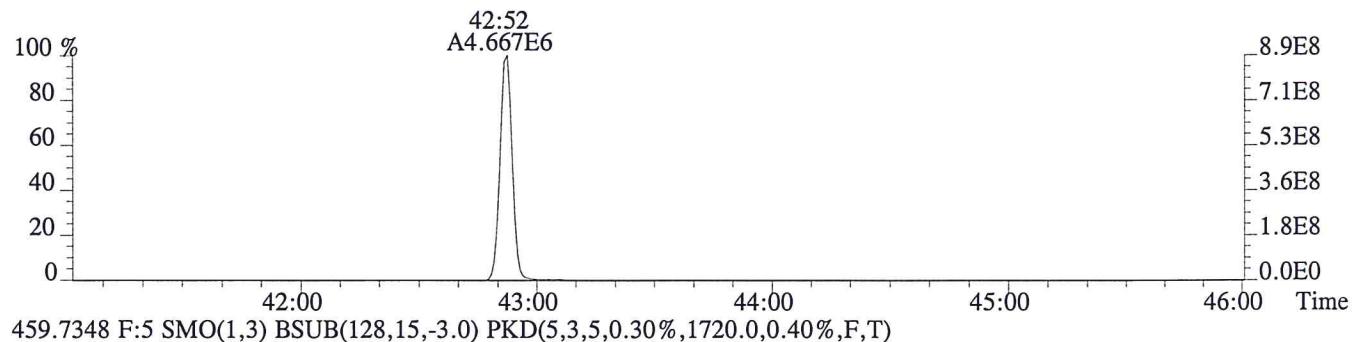
File:P600009 #1-213 Acq:19-AUG-2015 16:36:39 Probe EI+ Magnet SIR VG BioTech Mass spect<br/>Sample#1 Exp:CS5  
423.7766 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,14836.0,0.40%,F,T)



File:P600009 #1-448 Acq:19-AUG-2015 16:36:39 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:CS5  
 441.7428 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1288.0,0.40%,F,T)



File:P600009 #1-448 Acq:19-AUG-2015 16:36:39 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:CSS  
 457.7377 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1772.0,0.40%,F,T)



## USEPA - ITD

FORM 4A  
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: ALS ENVIRONMENTAL

Episode No.:

Contract No.:

SAS No.:

Initial Calibration Date: 08/19/15

Instrument ID: E-HRMS-08

GC Column ID: DB-5MSUI

VER Data Filename: P600011

Analysis Date: 19-AUG-15 Time: 18:14:46

	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	CONC. FOUND	CONC. RANGE (3) (ng/mL)	%RSD (4)
<b>NATIVE ANALYTES</b>						
2,3,7,8-TCDD	M/M+2	0.78	0.65-0.89	9.8	7.8 - 12.9	-1.6
1,2,3,7,8-PeCDD	M+2/M+4	1.56	1.32-1.78	50	39 - 65	1.0
1,2,3,4,7,8-HxCDD	M+2/M+4	1.26	1.05-1.43	50	39 - 64	-1.0
1,2,3,6,7,8-HxCDD	M+2/M+4	1.23	1.05-1.43	50	39 - 64	0.2
1,2,3,7,8,9-HxCDD	M+2/M+4	1.25	1.05-1.43	48	41 - 61	-3.9
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.04	0.88-1.20	50	43 - 58	-0.1
OCDD	M+2/M+4	0.89	0.76-1.02	99	79 - 126	-0.6
2,3,7,8-TCDF	M/M+2	0.77	0.65-0.89	10.1	8.4 - 12.0	0.7
1,2,3,7,8-PeCDF	M+2/M+4	1.53	1.32-1.78	50	41 - 60	0.4
2,3,4,7,8-PeCDF	M+2/M+4	1.54	1.32-1.78	50	41 - 61	0.6
1,2,3,4,7,8-HxCDF	M+2/M+4	1.22	1.05-1.43	50	45 - 56	-0.8
1,2,3,6,7,8-HxCDF	M+2/M+4	1.23	1.05-1.43	50	44 - 57	0.1
1,2,3,7,8,9-HxCDF	M+2/M+4	1.25	1.05-1.43	50	45 - 56	0.3
2,3,4,6,7,8-HxCDF	M+2/M+4	1.22	1.05-1.43	49	44 - 57	-1.2
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.03	0.88-1.20	50	45 - 55	-0.6
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.03	0.88-1.20	49	43 - 58	-1.1
OCDF	M+2/M+4	0.90	0.76-1.02	100	63 - 159	-0.2

(1) See Table 8, Method 1613B, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613B.

(3) Contract-required concentration range as specified in Table 6, Method 1613B, under VER.

(4) The beginning CCAL %RSD for the 17 unlabeled standard must not exceed +/- 20%, Section 7.7.4.1. The ending CCAL must not exceed +/-25%, Section 8.3.2.4, Method 8290

12/2012

1613F4A.FRM

## USEPA - ITD

FORM 4B  
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: ALS ENVIRONMENTAL

Episode No.:

Contract No.:

SAS No.:

Initial Calibration Date: 08/19/15

Instrument ID: E-HRMS-08

GC Column ID: DB-5MSUI

VER Data Filename: P600011

Analysis Date: 19-AUG-15 Time: 18:14:46

LABELED COMPOUNDS	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	CONC. FOUND	CONC. RANGE (3) (ng/mL)	%RSD (5)
13C-2,3,7,8-TCDD	M/M+2	0.79	0.65-0.89	103	82 - 121	2.9
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.58	1.32-1.78	104	62 - 160	3.6
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.26	1.05-1.43	101	85 - 117	0.8
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.27	1.05-1.43	105	85 - 118	4.7
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.05	0.88-1.20	108	72 - 138	7.9
13C-OCDD	M+2/M+4	0.90	0.76-1.02	218	96 - 415	9.0
13C-2,3,7,8-TCDF	M/M+2	0.80	0.65-0.89	98	71 - 140	-1.6
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.59	1.32-1.78	101	76 - 130	1.4
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.58	1.32-1.78	105	77 - 130	4.6
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.52	0.43-0.59	100	76 - 131	-0.2
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.52	0.43-0.59	102	70 - 143	2.5
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.52	0.43-0.59	100	74 - 135	-0.4
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.52	0.43-0.59	102	73 - 137	2.1
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.45	0.37-0.51	104	78 - 129	4.1
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.44	0.37-0.51	106	77 - 129	6.3

## CLEANUP STANDARD

37Cl-2,3,7,8-TCDD 10.2 7.8 - 12.7 1.8

- (1) See Table 8, Method 1613B, for m/z specifications.
- (2) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613B.
- (3) Contract-required concentration range, as specified in Table 6, Method 1613B, under VER.
- (4) No ion abundance ratio; report concentration found.
- (5) The beginning CCAL %RSD for the labeled standard must not exceed +/- 30% Section 7.7.4.2. The ending CCAL must not exceed +/- 35%, Sec 8.3.2.4 (8290)

12/2012  
1613F4B.FRM

ALS ENVIRONMENTAL  
Sample Response Summary

CLIENT ID.  
54819

Run #7      Filename P600011      Samp: 1      Inj: 1      Acquired: 19-AUG-15 18:14:46  
Processed: 20-AUG-15 09:52:05      Sample ID: CS3 SECOND SOURCE

Typ	Name	RT-1	Resp 1	Resp 2	Ratio	Meet	Mod?	RRF
1 Unk	2,3,7,8-TCDF	29:04	3.220e+04	4.203e+04	0.77	yes	no	0.941
2 Unk	1,2,3,7,8-PeCDF	33:03	2.558e+05	1.669e+05	1.53	yes	no	0.987
3 Unk	2,3,4,7,8-PeCDF	33:55	2.522e+05	1.639e+05	1.54	yes	no	0.934
4 Unk	1,2,3,4,7,8-HxCDF	36:30	2.262e+05	1.847e+05	1.22	yes	no	1.189
5 Unk	1,2,3,6,7,8-HxCDF	36:37	2.391e+05	1.949e+05	1.23	yes	no	1.126
6 Unk	2,3,4,6,7,8-HxCDF	37:06	2.279e+05	1.862e+05	1.22	yes	no	1.116
7 Unk	1,2,3,7,8,9-HxCDF	37:50	2.134e+05	1.710e+05	1.25	yes	no	1.158
8 Unk	1,2,3,4,6,7,8-HpCDF	39:04	2.059e+05	1.995e+05	1.03	yes	no	1.373
9 Unk	1,2,3,4,7,8,9-HpCDF	40:30	2.036e+05	1.977e+05	1.03	yes	no	1.287
10 Unk	OCDF	43:04	2.706e+05	2.991e+05	0.90	yes	no	1.257
11 Unk	2,3,7,8-TCDD	29:48	3.083e+04	3.972e+04	0.78	yes	no	1.010
12 Unk	1,2,3,7,8-PeCDD	34:11	1.875e+05	1.205e+05	1.56	yes	no	0.932
13 Unk	1,2,3,4,7,8-HxCDD	37:13	1.676e+05	1.334e+05	1.26	yes	no	1.026
14 Unk	1,2,3,6,7,8-HxCDD	37:18	1.649e+05	1.338e+05	1.23	yes	no	1.021
15 Unk	1,2,3,7,8,9-HxCDD	37:32	1.778e+05	1.424e+05	1.25	yes	no	1.133
16 Unk	1,2,3,4,6,7,8-HpCDD	40:00	1.643e+05	1.586e+05	1.04	yes	no	1.034
17 Unk	OCDD	42:52	2.361e+05	2.654e+05	0.89	yes	no	1.111
18 IS	13C-2,3,7,8-TCDF	29:03	3.474e+05	4.365e+05	0.80	yes	no	1.379
19 IS	13C-1,2,3,7,8-PeCDF	33:02	5.231e+05	3.296e+05	1.59	yes	no	1.456
20 IS	13C-2,3,4,7,8-PeCDF	33:54	5.419e+05	3.435e+05	1.58	yes	no	1.465
21 IS	13C-1,2,3,4,7,8-HxCDF	36:30	2.378e+05	4.585e+05	0.52	yes	no	1.075
22 IS	13C-1,2,3,6,7,8-HxCDF	36:36	2.623e+05	5.077e+05	0.52	yes	no	1.158
23 IS	13C-2,3,4,6,7,8-HxCDF	37:05	2.558e+05	4.955e+05	0.52	yes	no	1.133
24 IS	13C-1,2,3,7,8,9-HxCDF	37:49	2.258e+05	4.363e+05	0.52	yes	no	1.024
25 IS	13C-1,2,3,4,6,7,8-HpCDF	39:03	1.837e+05	4.106e+05	0.45	yes	no	0.880
26 IS	13C-1,2,3,4,7,8,9-HpCDF	40:29	1.939e+05	4.371e+05	0.44	yes	no	0.914
27 IS	13C-2,3,7,8-TCDD	29:47	3.128e+05	3.967e+05	0.79	yes	no	1.193
28 IS	13C-1,2,3,7,8-PeCDD	34:11	4.007e+05	2.535e+05	1.58	yes	no	1.094
29 IS	13C-1,2,3,4,7,8-HxCDD	37:12	3.309e+05	2.619e+05	1.26	yes	no	0.906
30 IS	13C-1,2,3,6,7,8-HxCDD	37:18	3.263e+05	2.579e+05	1.27	yes	no	0.860
31 IS	13C-1,2,3,4,6,7,8-HpCDD	39:59	3.204e+05	3.046e+05	1.05	yes	no	0.892
32 IS	13C-OCDD	42:51	4.295e+05	4.787e+05	0.90	yes	no	0.642
33 RS/RT	13C-1,2,3,4-TCDD	29:15	2.554e+05	3.223e+05	0.79	yes	no	-
34 RS/RT	13C-1,2,3,7,8,9-HxCDD	37:32	3.615e+05	2.876e+05	1.26	yes	no	-
35 C/Up	37Cl-2,3,7,8-TCDD	29:48	7.431e+04				no	1.263

---

ALS ENVIRONMENTAL  
10450 Stancliff Rd, Suite 115  
Houston, TX 77099  
Office (713) 266-1599. Fax (713) 266-0130

www.alsglobal.com

ALS ENVIRONMENTAL  
Signal/Noise Height Ratio Summary

CLIENT ID.  
54819

Run #7   Filename P600011           Samp: 1   Inj: 1   Acquired: 19-AUG-15 18:14:46  
Processed: 20-AUG-15 09:52:05           LAB. ID: CS3 SECOND SOURCE

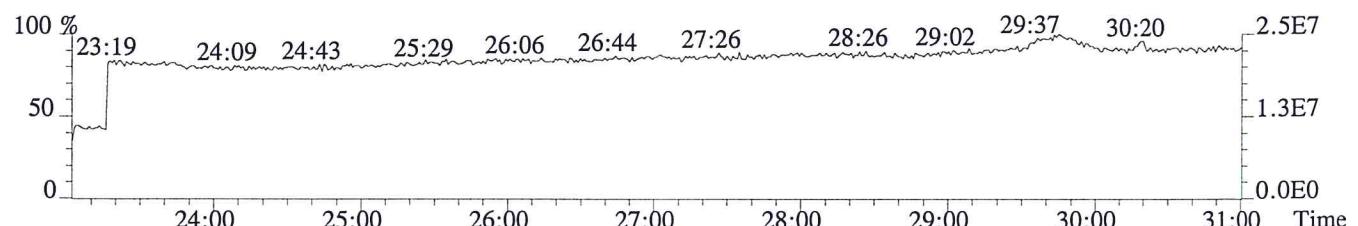
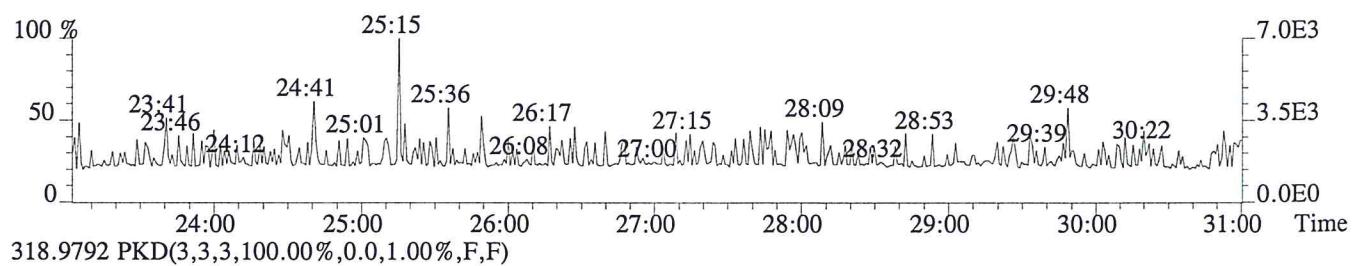
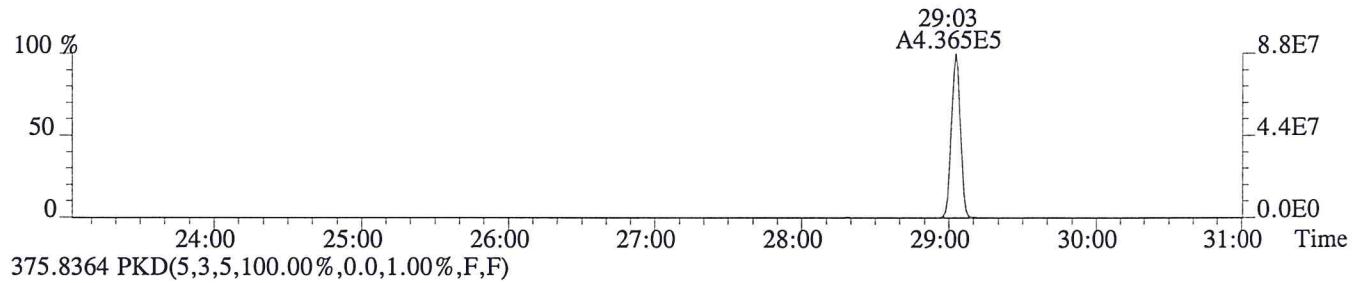
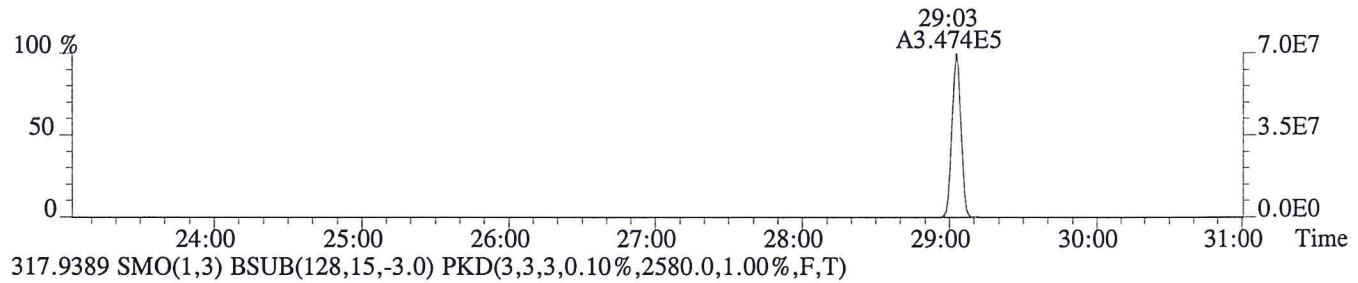
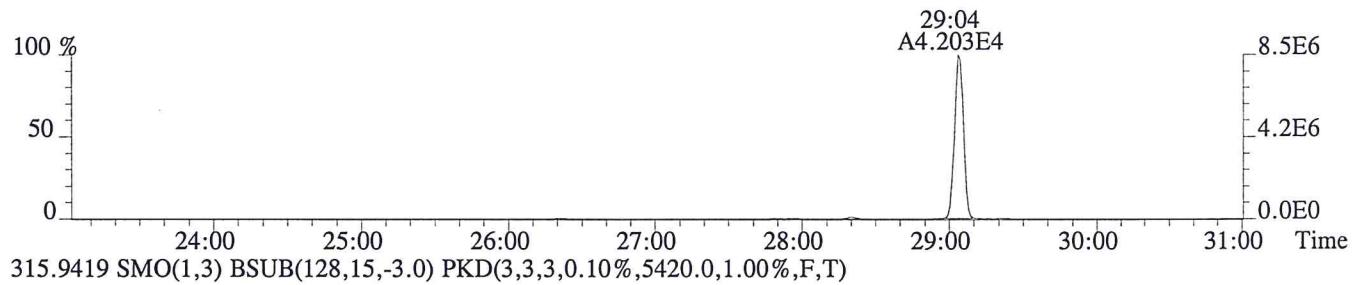
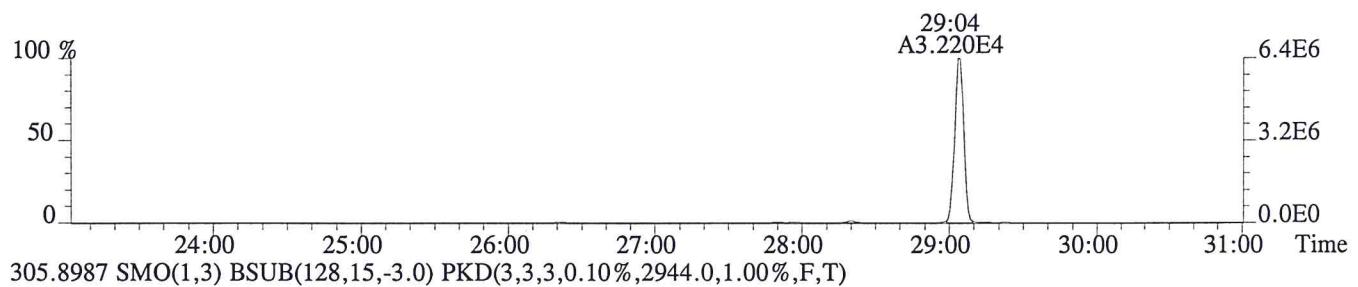
	Name	Signal 1	Noise 1	S/N Rat.1	Signal 2	Noise 2	S/N Rat.2
--	------	----------	---------	-----------	----------	---------	-----------

1	2,3,7,8-TCDF	6.39e+06	2.09e+03	3.1e+03	8.47e+06	2.94e+03	2.9e+03
2	1,2,3,7,8-PeCDF	5.15e+07	2.39e+03	2.2e+04	3.41e+07	3.88e+03	8.8e+03
3	2,3,4,7,8-PeCDF	5.36e+07	2.39e+03	2.2e+04	3.50e+07	3.88e+03	9.0e+03
4	1,2,3,4,7,8-HxCDF	5.20e+07	3.05e+03	1.7e+04	4.23e+07	2.12e+03	2.0e+04
5	1,2,3,6,7,8-HxCDF	5.32e+07	3.05e+03	1.7e+04	4.32e+07	2.12e+03	2.0e+04
6	2,3,4,6,7,8-HxCDF	5.25e+07	3.05e+03	1.7e+04	4.29e+07	2.12e+03	2.0e+04
7	1,2,3,7,8,9-HxCDF	4.68e+07	3.05e+03	1.5e+04	3.78e+07	2.12e+03	1.8e+04
8	1,2,3,4,6,7,8-HpCDF	4.77e+07	1.04e+04	4.6e+03	4.57e+07	3.52e+03	1.3e+04
9	1,2,3,4,7,8,9-HpCDF	4.21e+07	1.04e+04	4.0e+03	4.05e+07	3.52e+03	1.2e+04
10	OCDF	5.05e+07	1.25e+03	4.0e+04	5.46e+07	2.46e+03	2.2e+04
11	2,3,7,8-TCDD	6.55e+06	1.91e+03	3.4e+03	8.46e+06	2.52e+03	3.4e+03
12	1,2,3,7,8-PeCDD	4.04e+07	3.51e+03	1.2e+04	2.61e+07	2.18e+03	1.2e+04
13	1,2,3,4,7,8-HxCDD	3.92e+07	1.29e+03	3.0e+04	3.12e+07	1.84e+03	1.7e+04
14	1,2,3,6,7,8-HxCDD	3.80e+07	1.29e+03	3.0e+04	3.11e+07	1.84e+03	1.7e+04
15	1,2,3,7,8,9-HxCDD	4.13e+07	1.29e+03	3.2e+04	3.28e+07	1.84e+03	1.8e+04
16	1,2,3,4,6,7,8-HpCDD	3.53e+07	3.24e+03	1.1e+04	3.41e+07	1.98e+03	1.7e+04
17	OCDD	4.42e+07	1.13e+03	3.9e+04	4.93e+07	1.52e+03	3.2e+04
18	13C-2,3,7,8-TCDF	7.01e+07	5.42e+03	1.3e+04	8.78e+07	2.58e+03	3.4e+04
19	13C-1,2,3,7,8-PeCDF	1.08e+08	2.96e+03	3.6e+04	6.81e+07	2.28e+03	3.0e+04
20	13C-2,3,4,7,8-PeCDF	1.17e+08	2.96e+03	3.9e+04	7.45e+07	2.28e+03	3.3e+04
21	13C-1,2,3,4,7,8-HxCDF	5.44e+07	1.82e+03	3.0e+04	1.05e+08	4.44e+03	2.4e+04
22	13C-1,2,3,6,7,8-HxCDF	5.73e+07	1.82e+03	3.1e+04	1.12e+08	4.44e+03	2.5e+04
23	13C-2,3,4,6,7,8-HxCDF	5.95e+07	1.82e+03	3.3e+04	1.14e+08	4.44e+03	2.6e+04
24	13C-1,2,3,7,8,9-HxCDF	5.01e+07	1.82e+03	2.7e+04	9.76e+07	4.44e+03	2.2e+04
25	13C-1,2,3,4,6,7,8-HpCDF	4.25e+07	5.19e+03	8.2e+03	9.47e+07	7.77e+03	1.2e+04
26	13C-1,2,3,4,7,8,9-HpCDF	4.04e+07	5.19e+03	7.8e+03	9.00e+07	7.77e+03	1.2e+04
27	13C-2,3,7,8-TCDD	6.58e+07	9.84e+03	6.7e+03	8.37e+07	5.09e+03	1.6e+04
28	13C-1,2,3,7,8-PeCDD	8.52e+07	2.40e+03	3.6e+04	5.36e+07	1.52e+03	3.5e+04
29	13C-1,2,3,4,7,8-HxCDD	7.68e+07	6.38e+03	1.2e+04	6.10e+07	3.96e+03	1.5e+04
30	13C-1,2,3,6,7,8-HxCDD	7.48e+07	6.38e+03	1.2e+04	5.91e+07	3.96e+03	1.5e+04
31	13C-1,2,3,4,6,7,8-HpCDD	6.89e+07	3.54e+03	1.9e+04	6.56e+07	2.36e+03	2.8e+04
32	13C-OCDD	7.99e+07	1.25e+03	6.4e+04	8.87e+07	1.28e+03	7.0e+04
33	13C-1,2,3,4-TCDD	5.27e+07	9.84e+03	5.4e+03	6.64e+07	5.09e+03	1.3e+04
34	13C-1,2,3,7,8,9-HxCDD	8.45e+07	6.38e+03	1.3e+04	6.67e+07	3.96e+03	1.7e+04
35	37Cl-2,3,7,8-TCDD	1.57e+07	3.34e+03	4.7e+03			

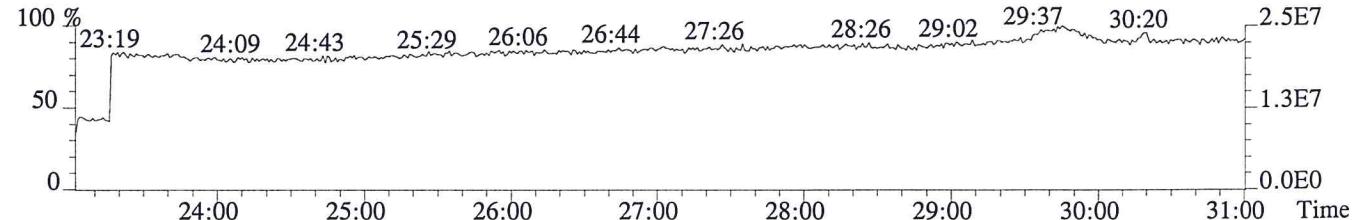
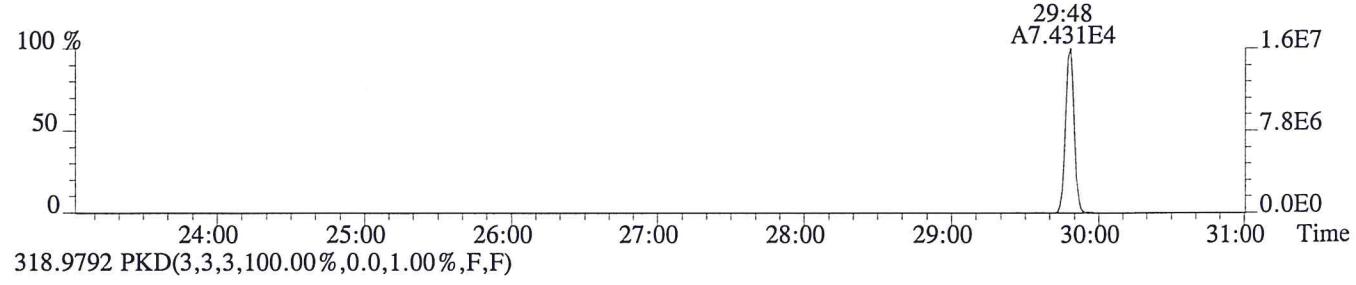
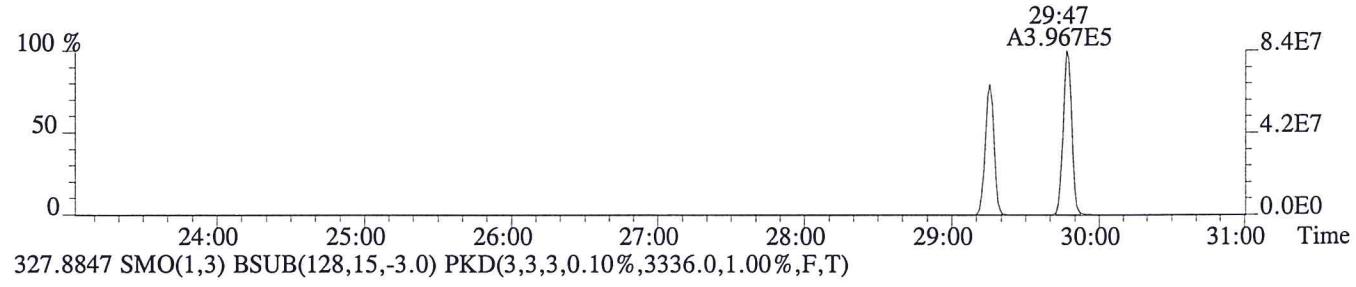
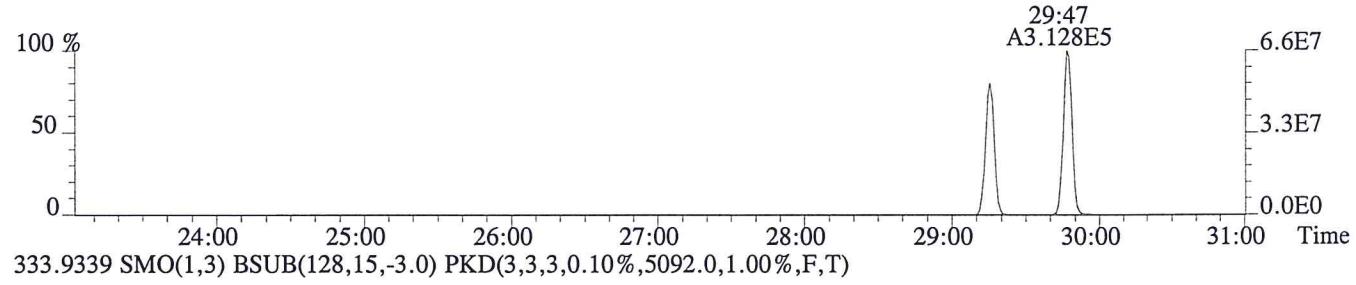
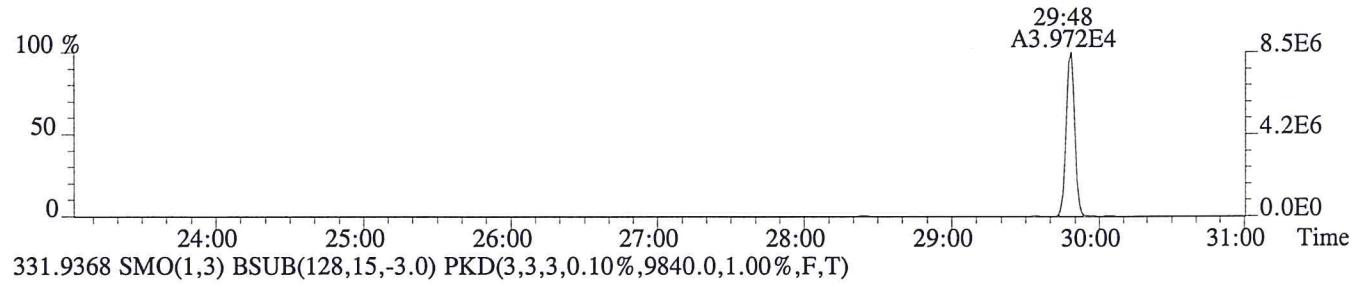
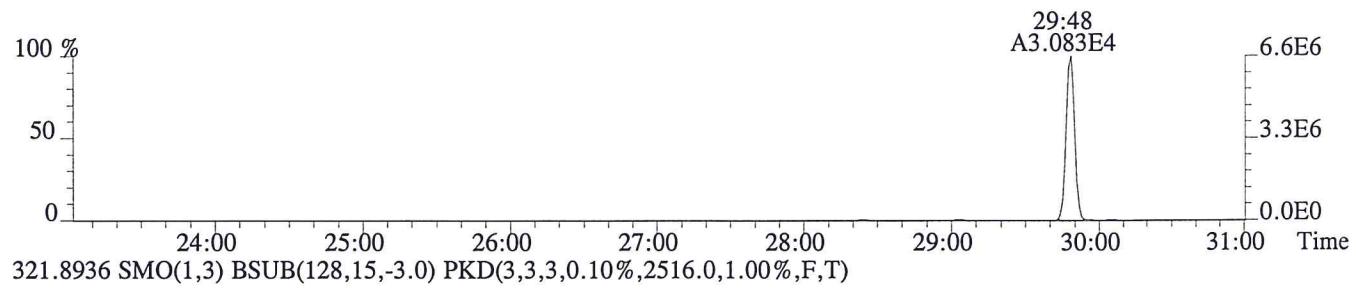
---

ALS ENVIRONMENTAL  
10450 Stancliff Rd., Suite 115  
Houston, TX 77099  
Office: (713) 266-1599. Fax: (713) 266-0130

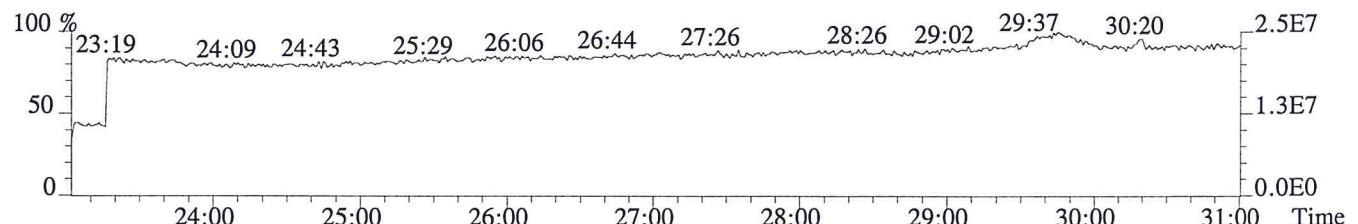
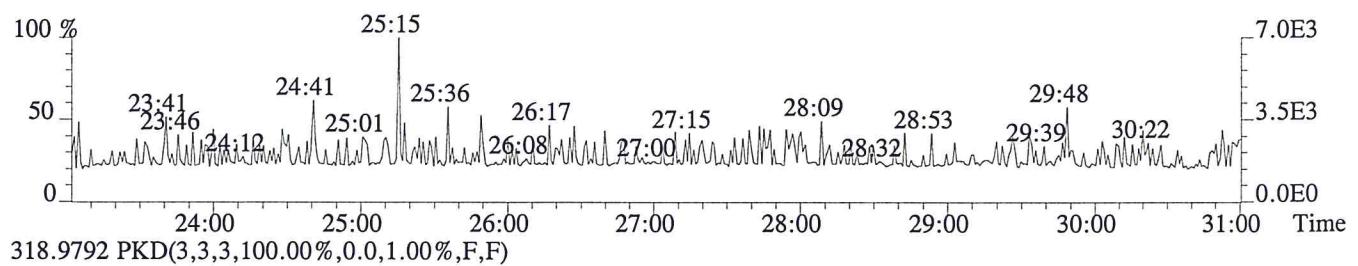
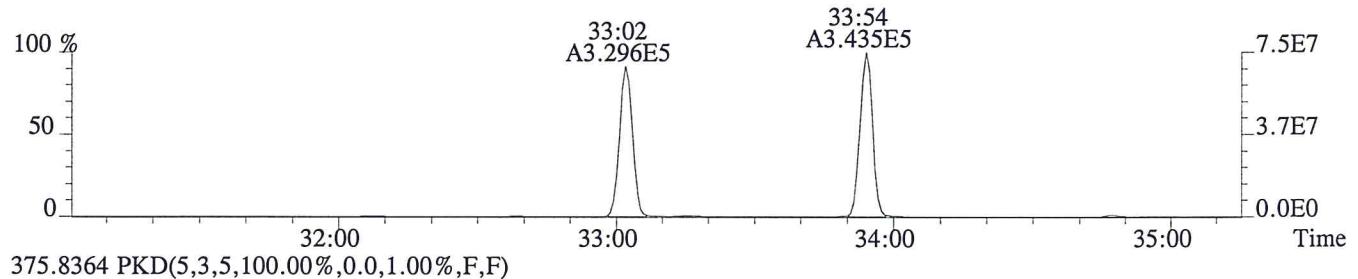
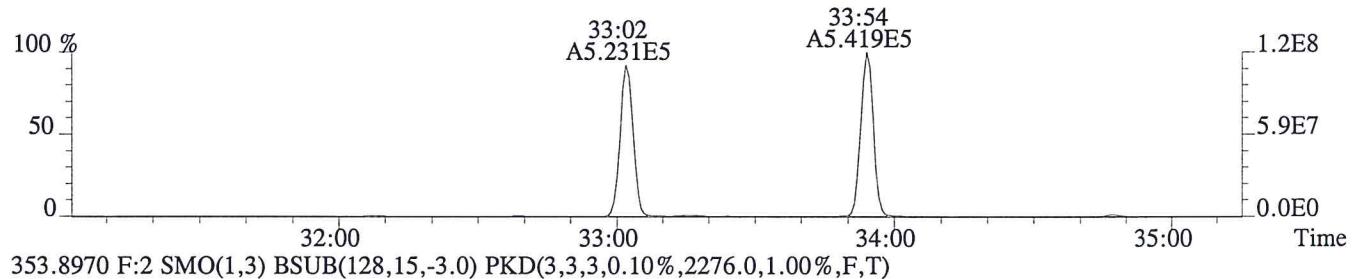
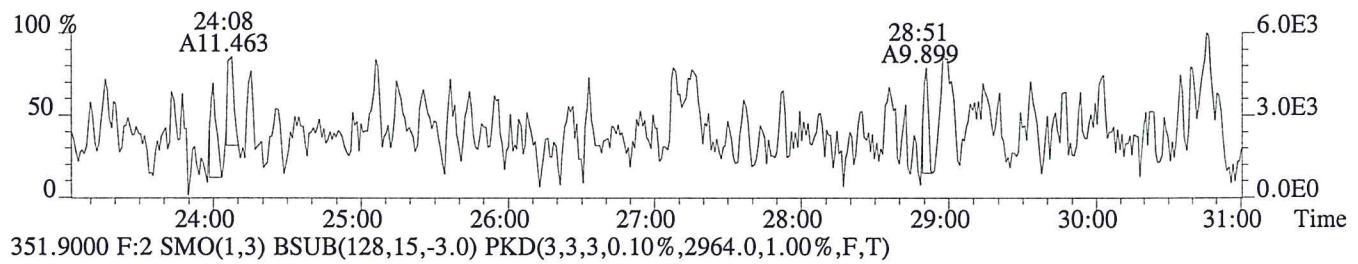
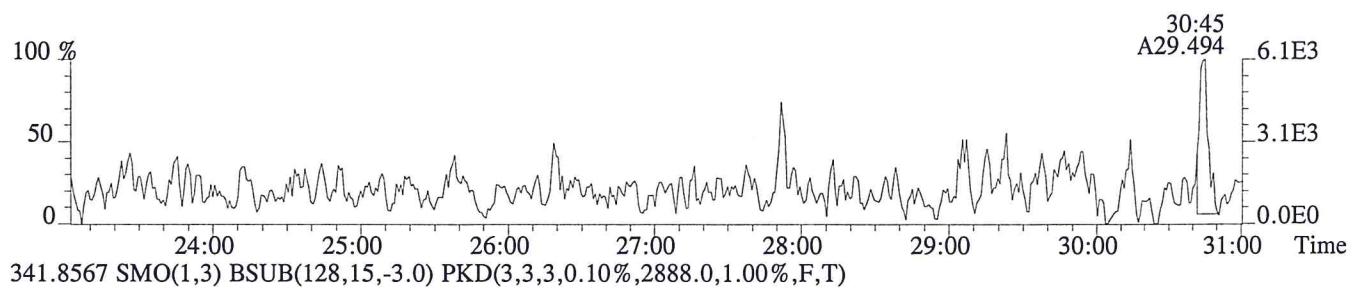
File:P600011 #1-566 Acq:19-AUG-2015 18:14:46 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:CS3 Second Source  
 303.9016 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,2088.0,1.00%,F,T)



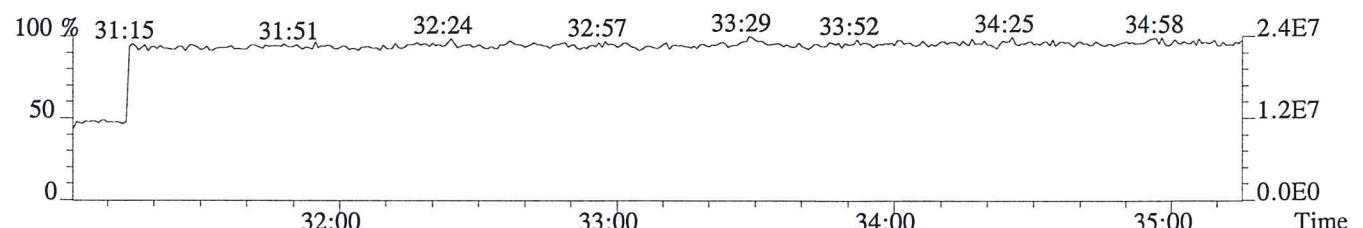
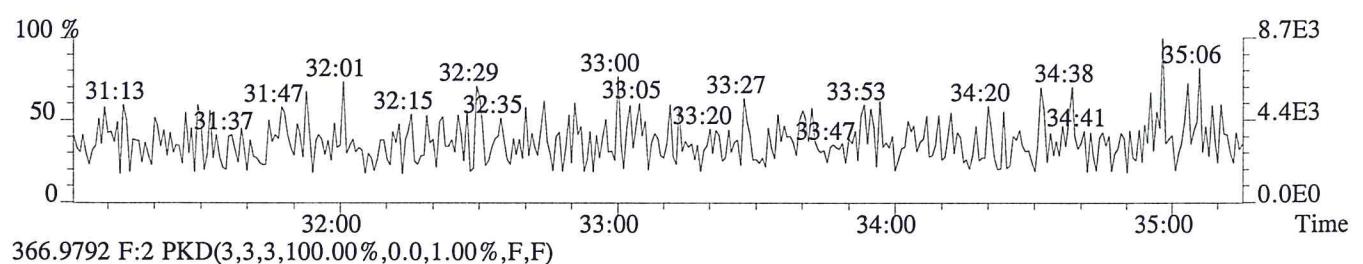
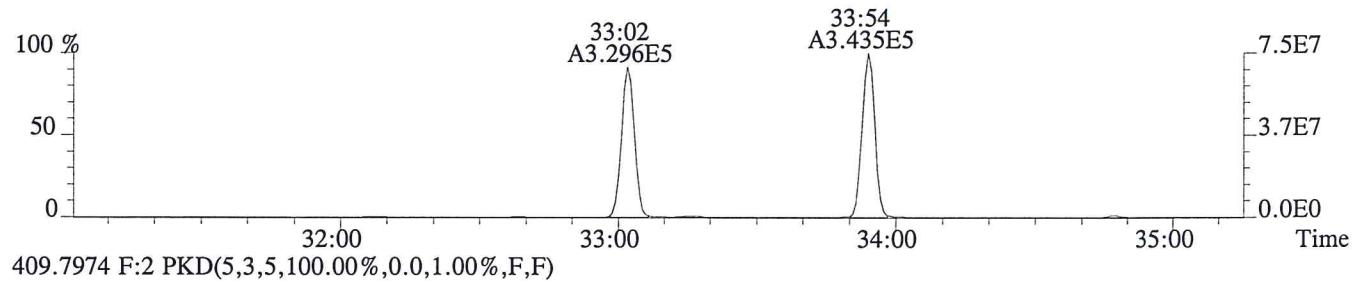
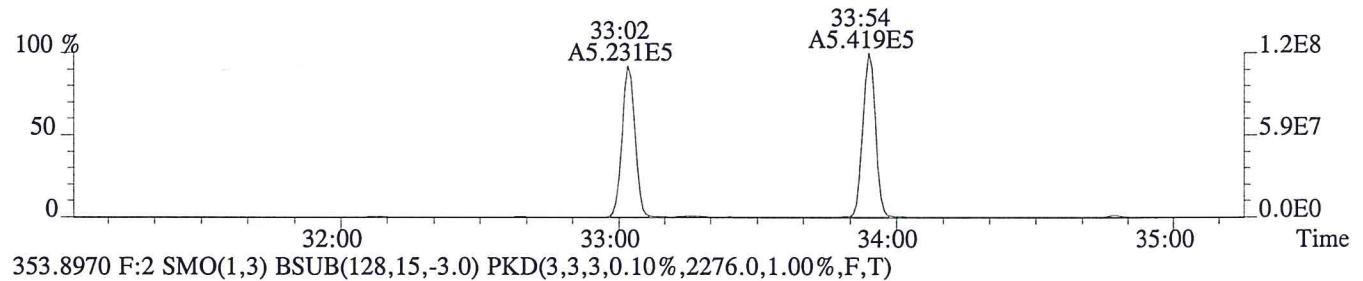
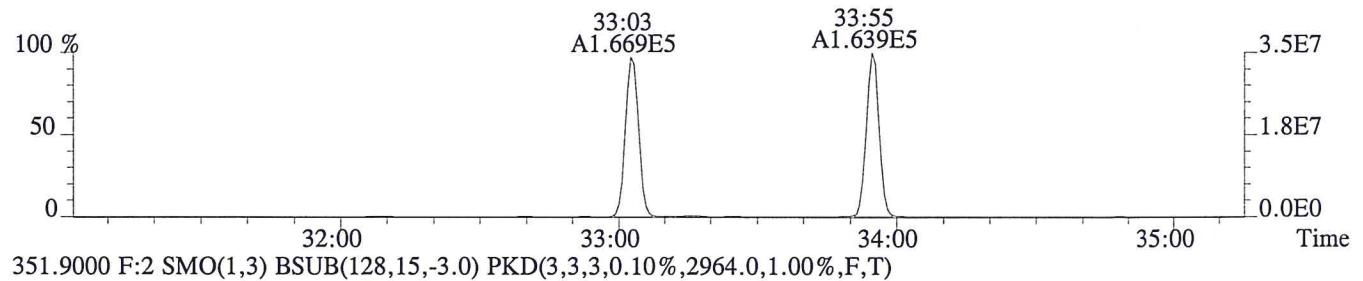
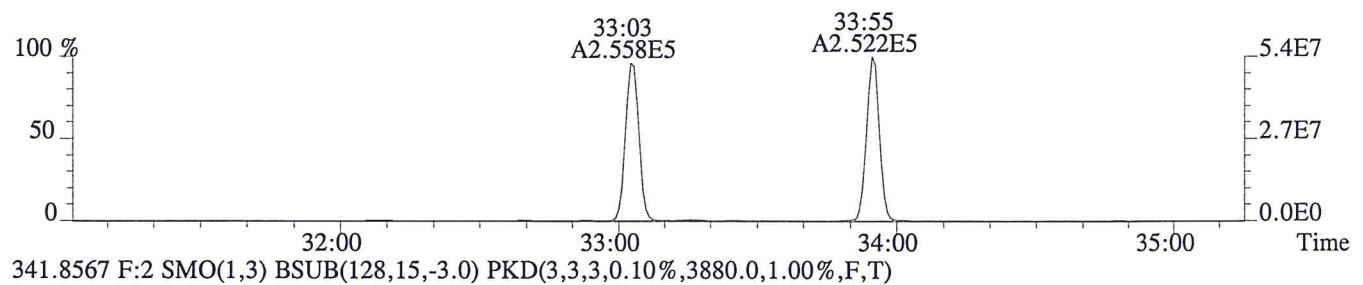
File:P600011 #1-566 Acq:19-AUG-2015 18:14:46 Probe EI+ Magnet SIR VG BioTech Mass spectf  
Sample#1 Exp:CS3 Second Source  
319.8965 SMÖ(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1912.0,1.00%,F,T)



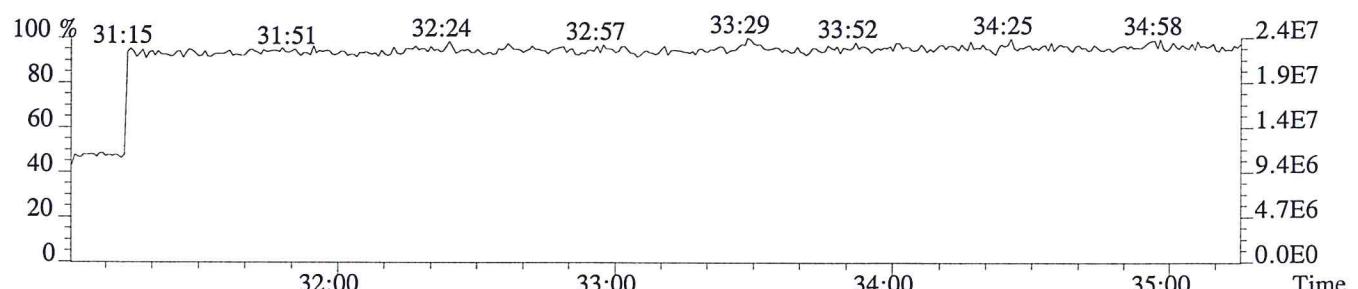
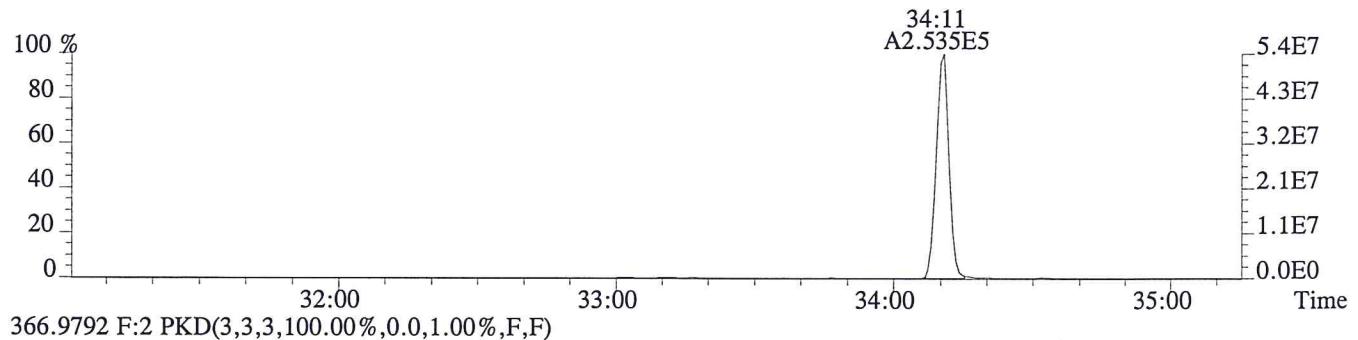
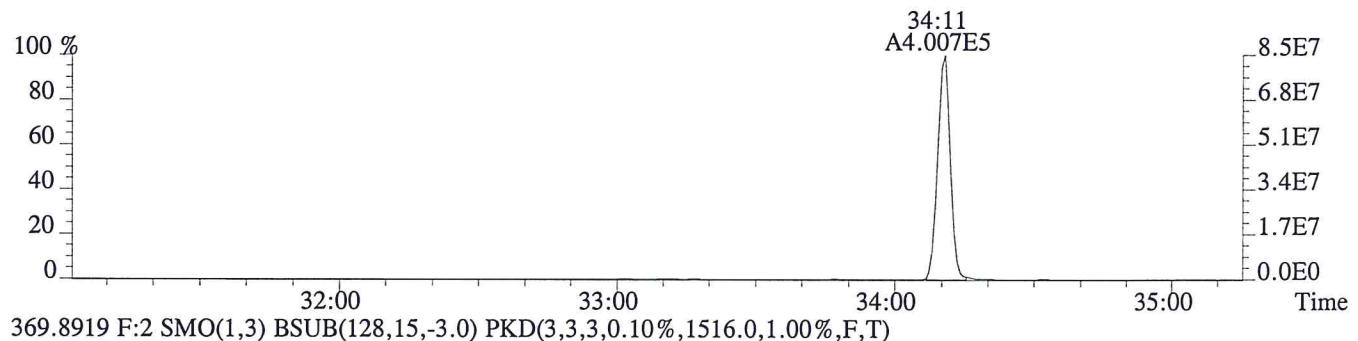
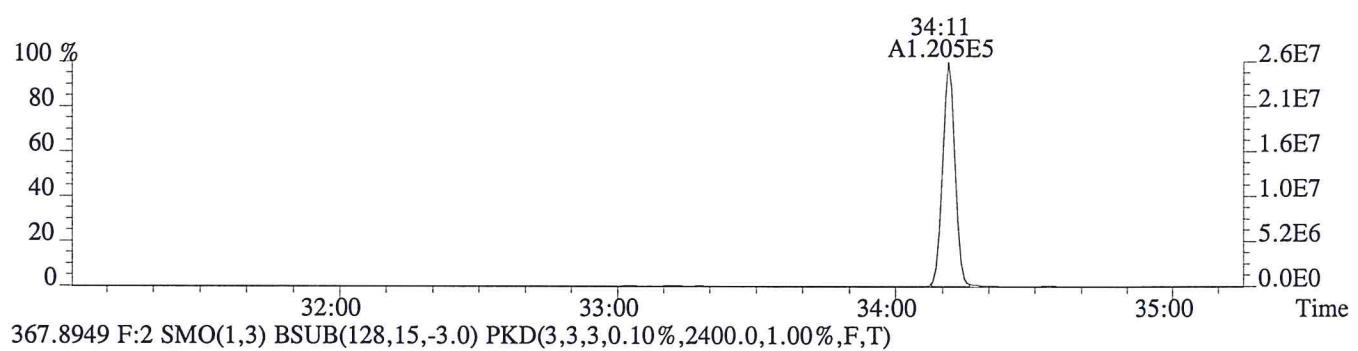
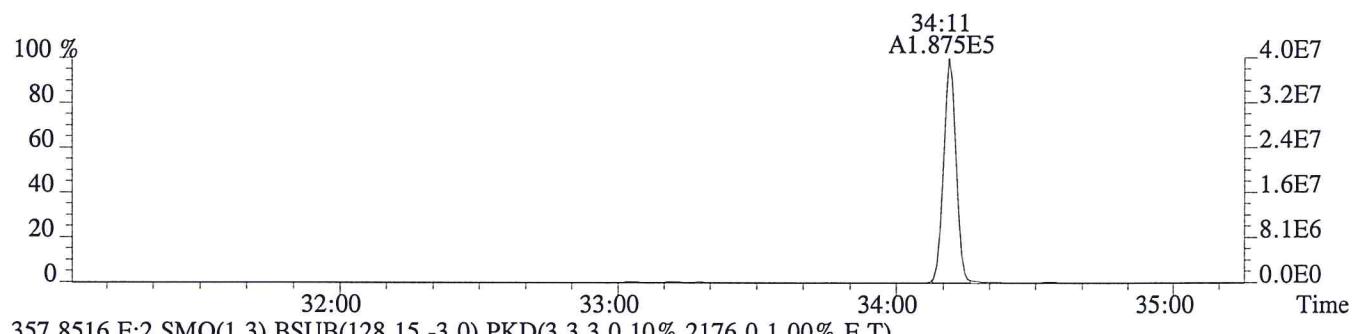
File:P600011 #1-566 Acq:19-AUG-2015 18:14:46 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:CS3 Second Source  
 339.8597 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1556.0,1.00%,F,T)



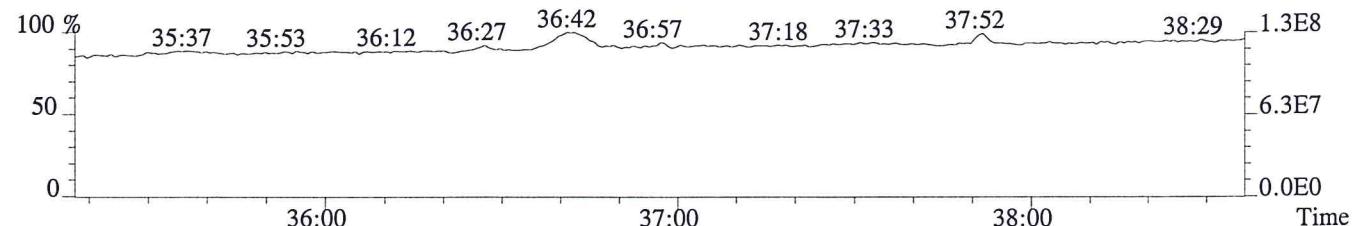
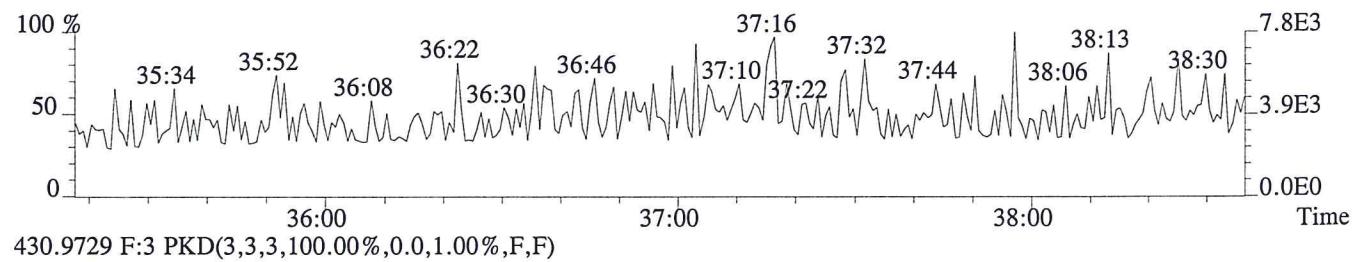
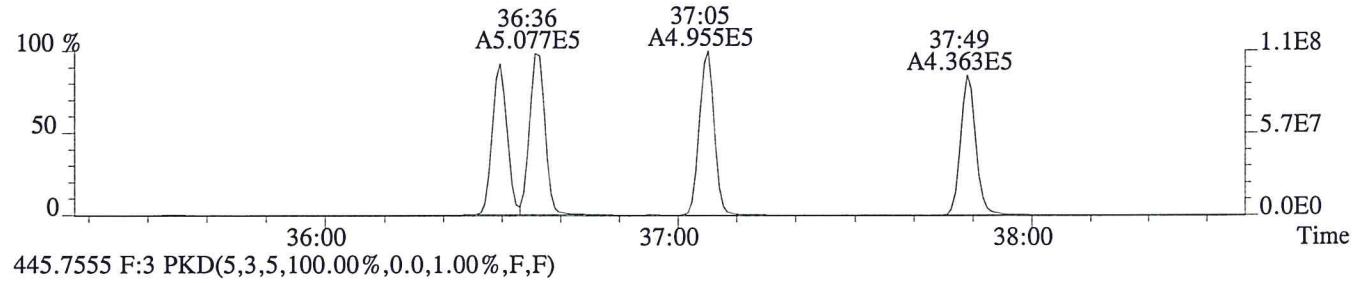
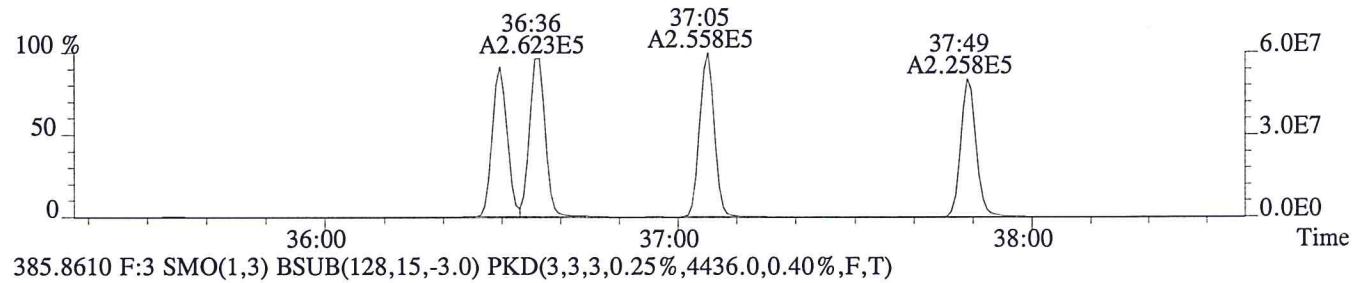
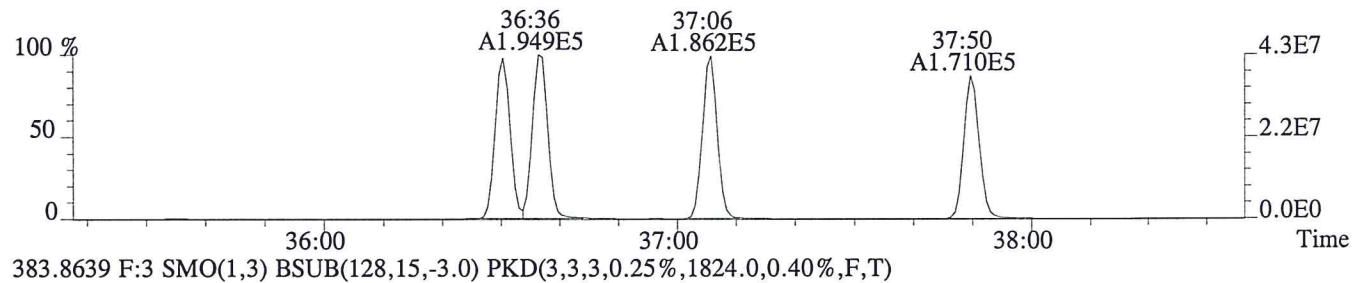
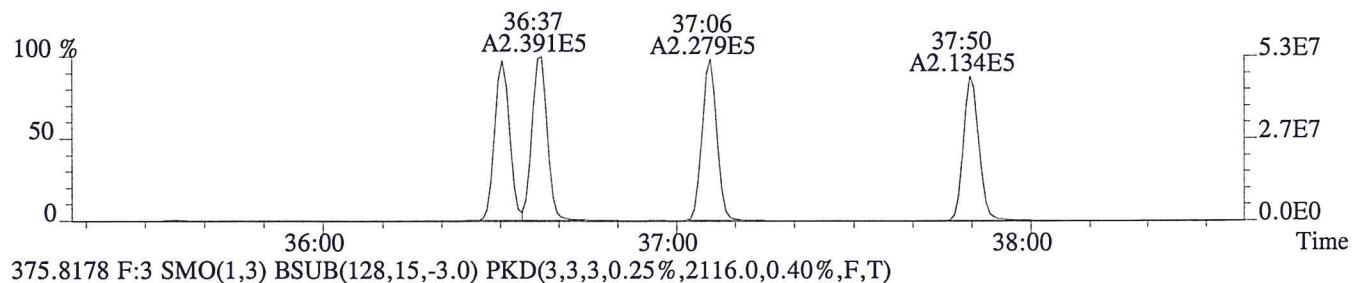
File:P600011 #1-380 Acq:19-AUG-2015 18:14:46 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:CS3 Second Source  
 339.8597 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,2392.0,1.00%,F,T)



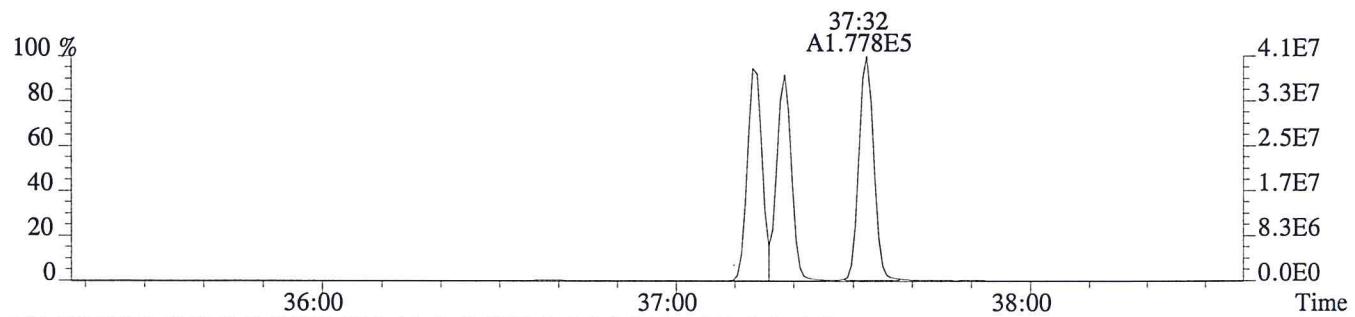
File:P600011 #1-380 Acq:19-AUG-2015 18:14:46 Probe EI+ Magnet SIR VG BioTech Mass spect<br>
 Sample#1 Exp:CS3 Second Source  
 355.8546 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,3512.0,1.00%,F,T)



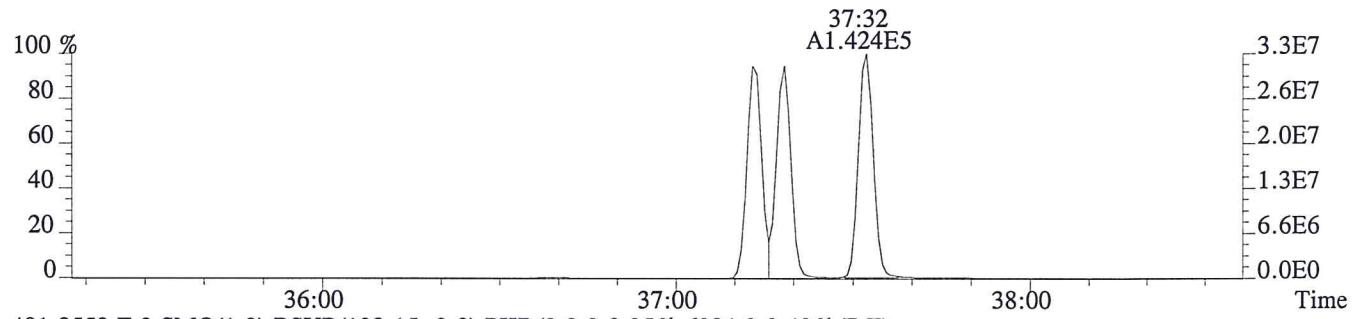
File:P600011 #1-299 Acq:19-AUG-2015 18:14:46 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:CS3 Second Source  
 373.8208 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,3048.0,0.40%,F,T)



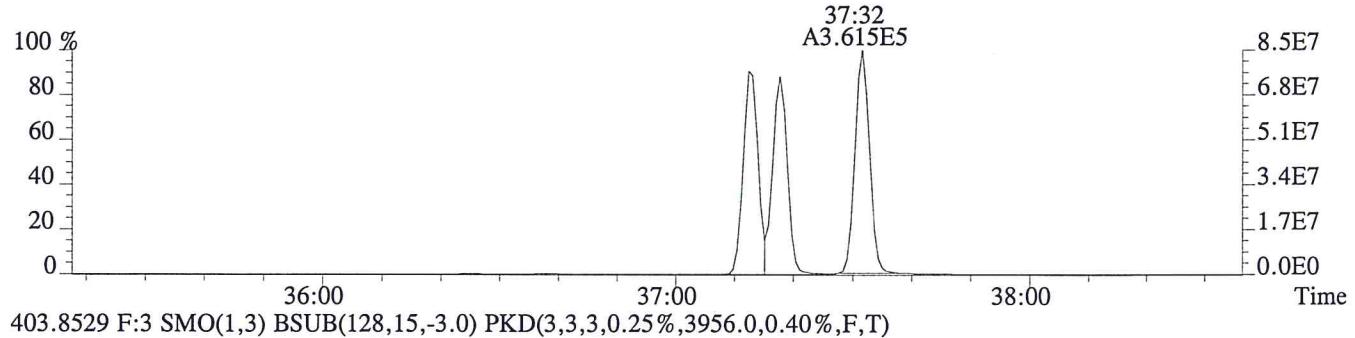
File:P600011 #1-299 Acq:19-AUG-2015 18:14:46 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:CS3 Second Source  
 389.8157 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1288.0,0.40%,F,T)



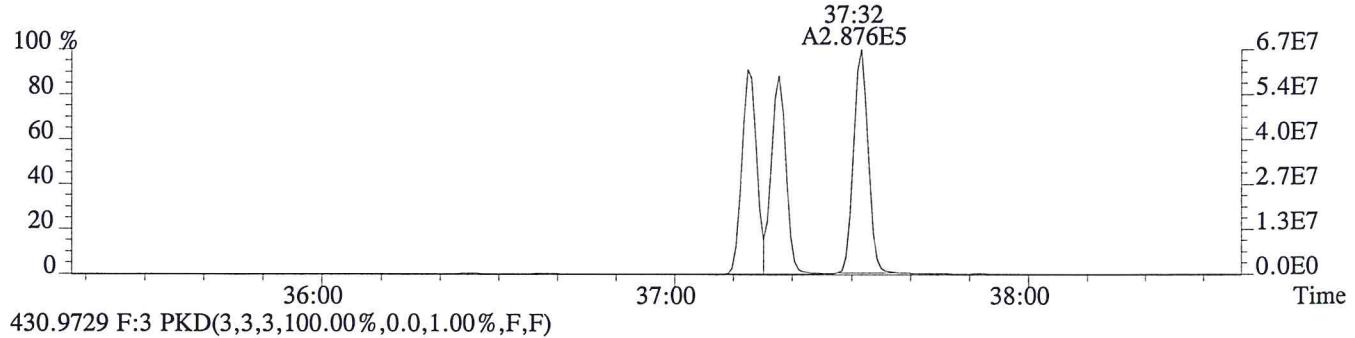
391.8127 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1840.0,0.40%,F,T)



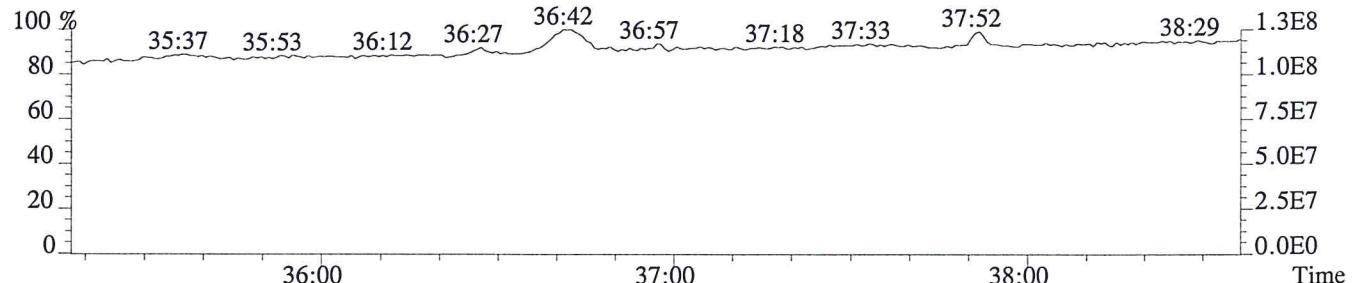
401.8559 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,6384.0,0.40%,F,T)



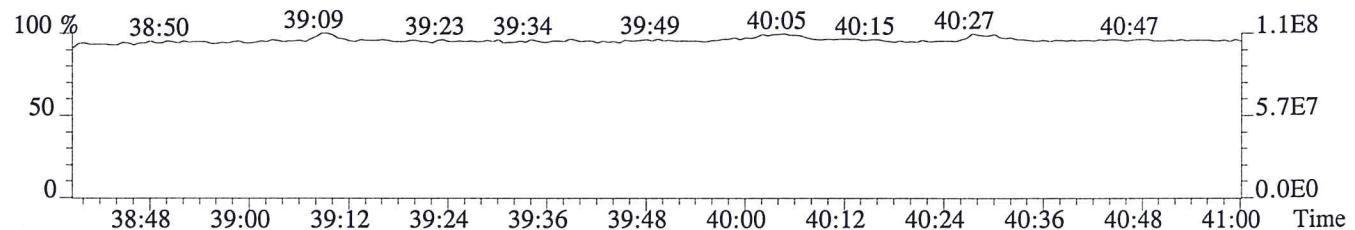
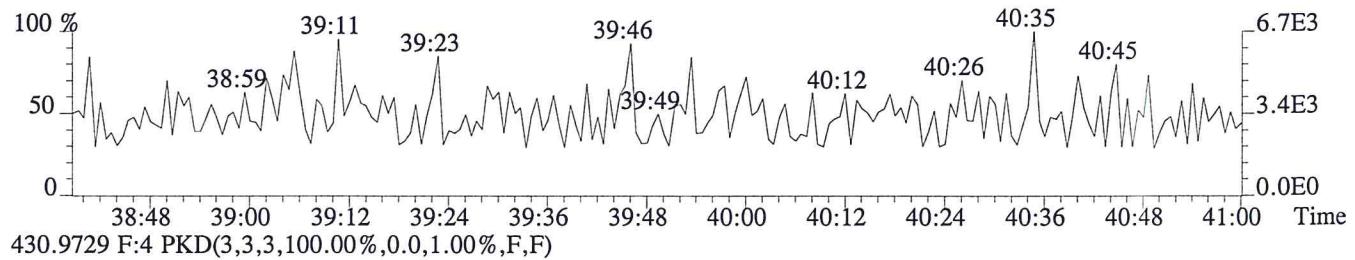
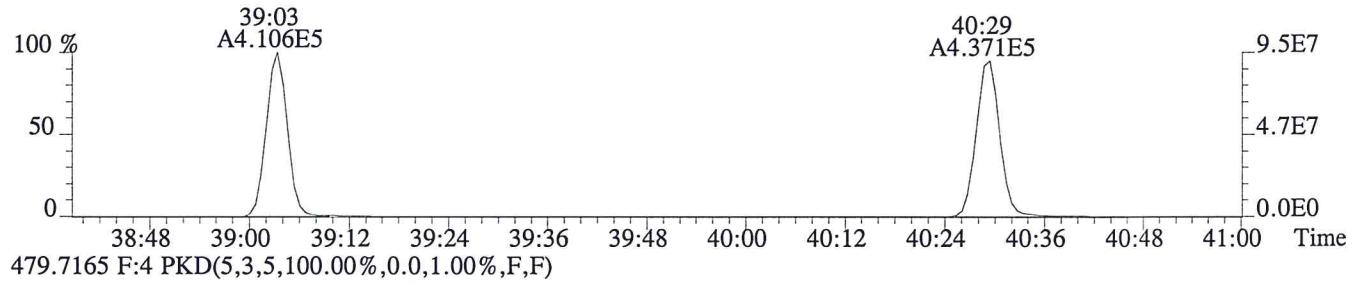
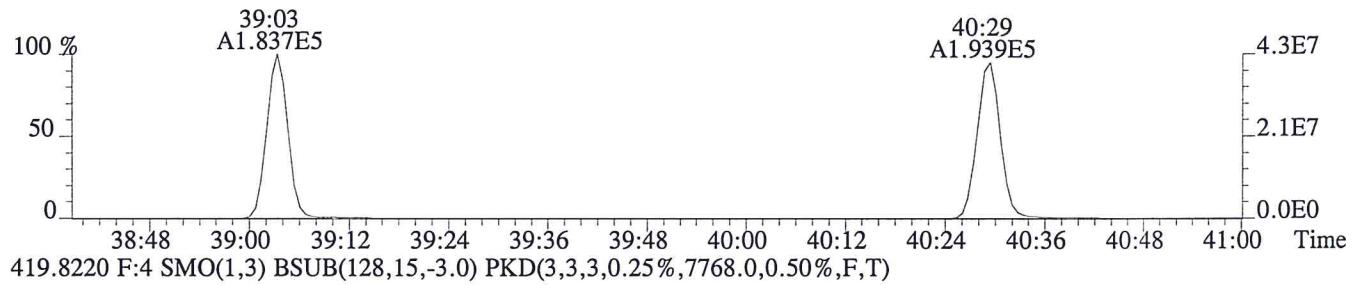
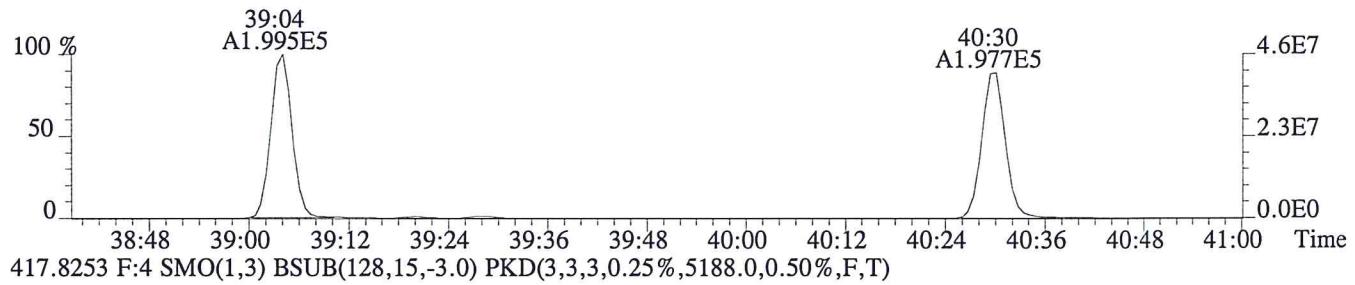
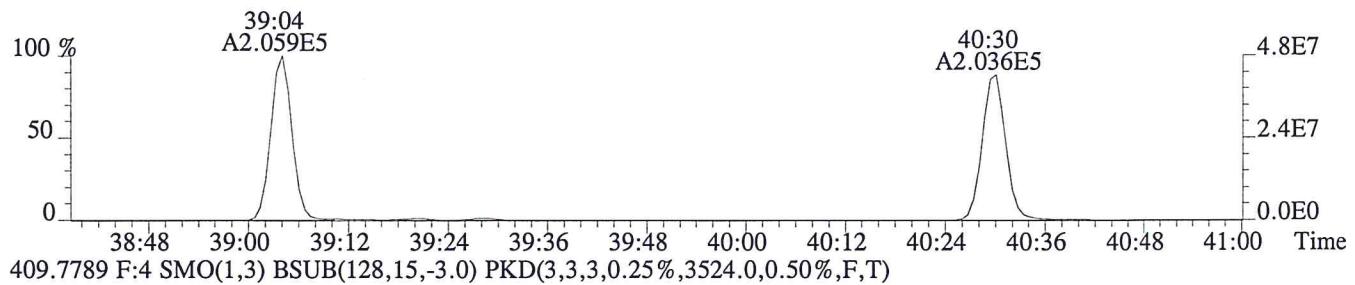
403.8529 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,3956.0,0.40%,F,T)



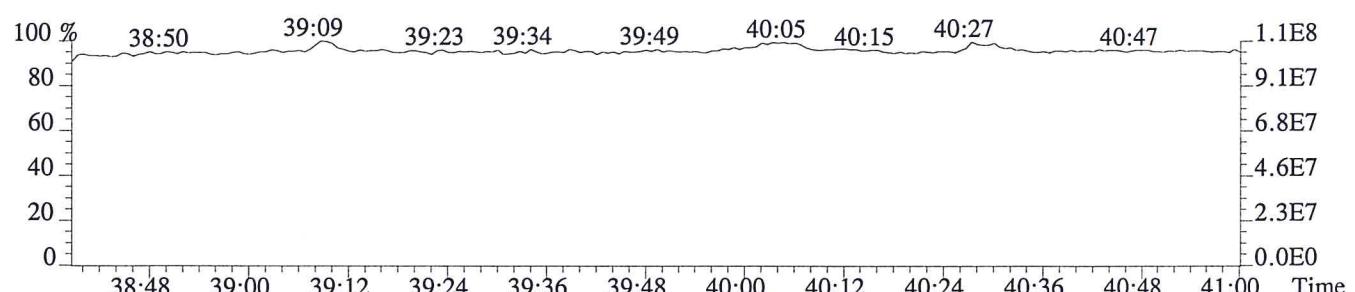
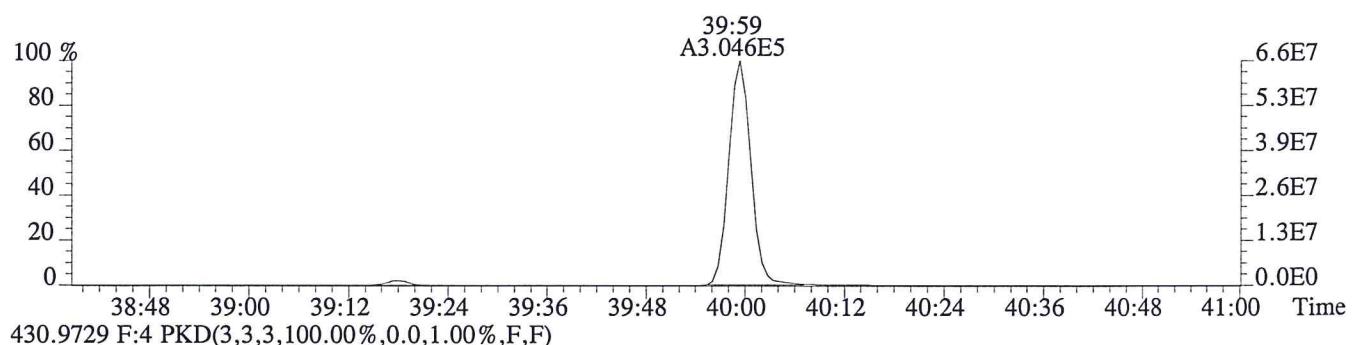
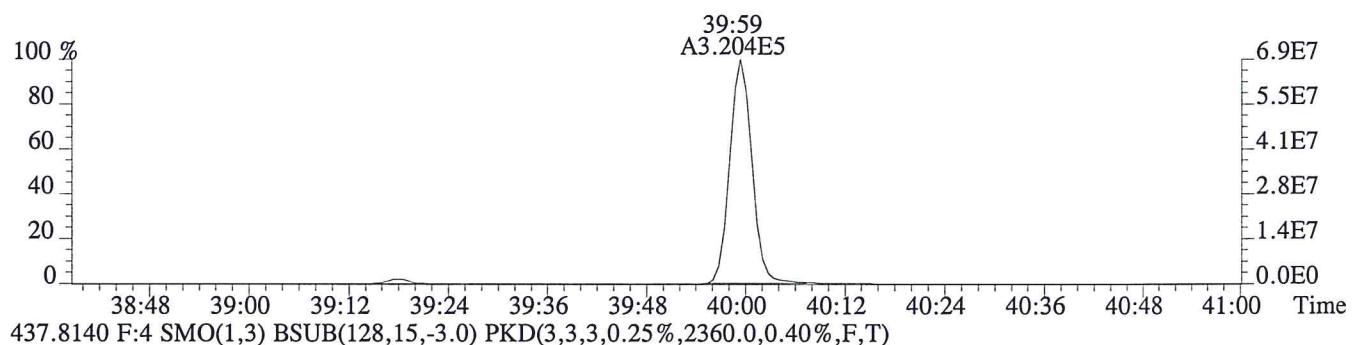
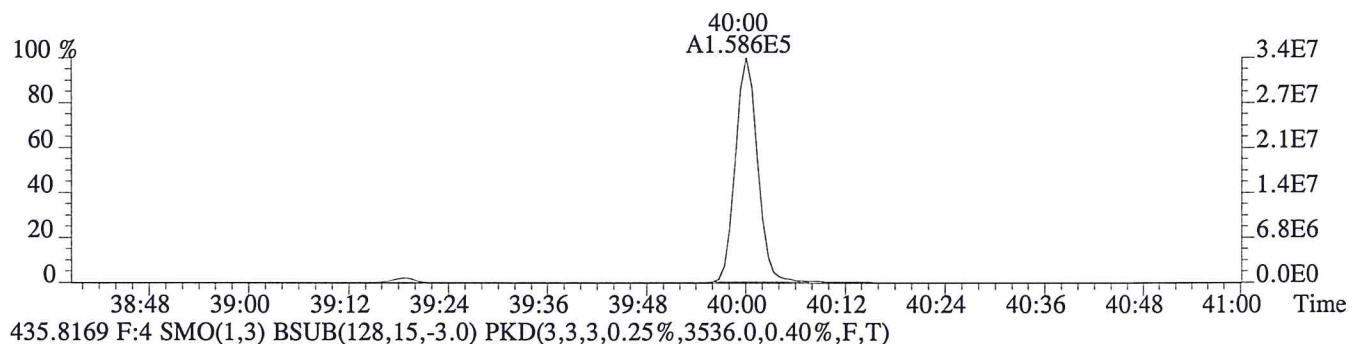
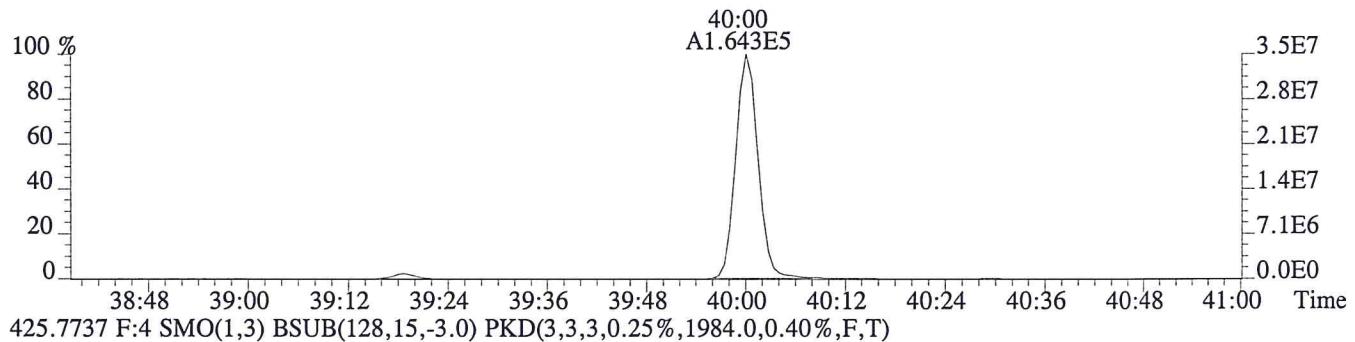
430.9729 F:3 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



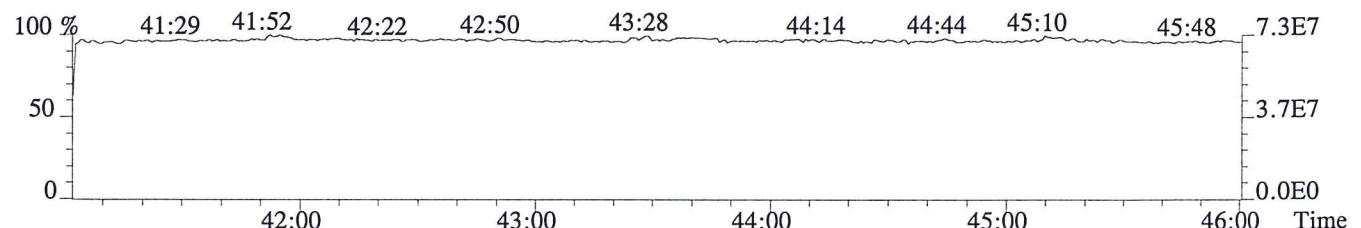
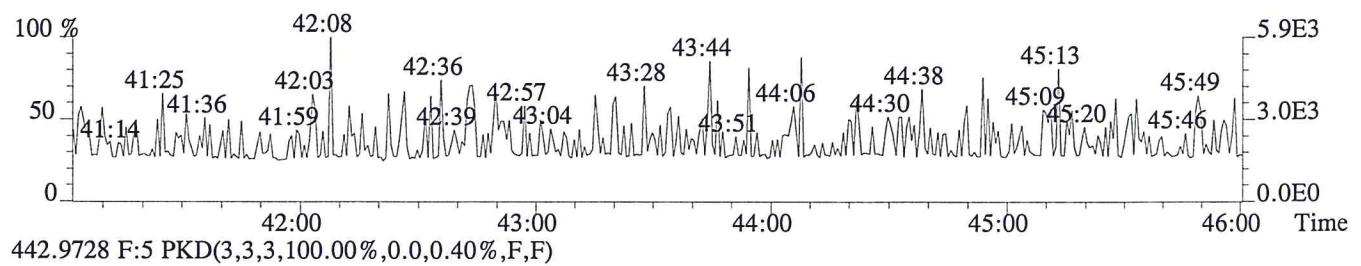
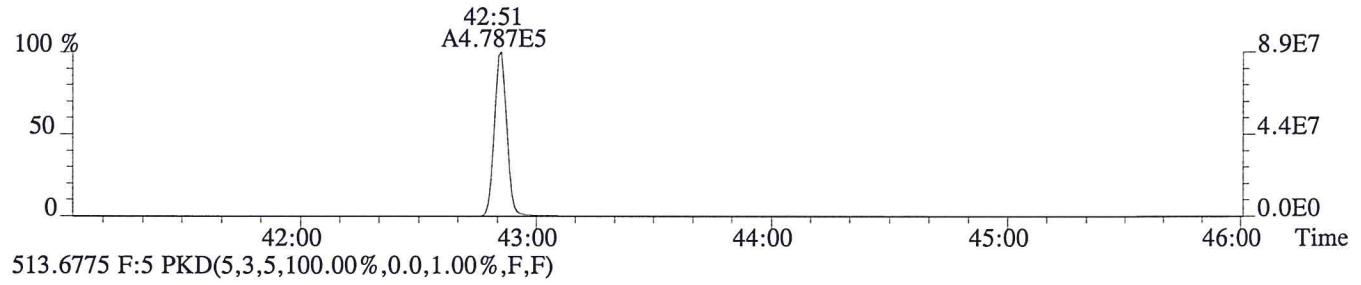
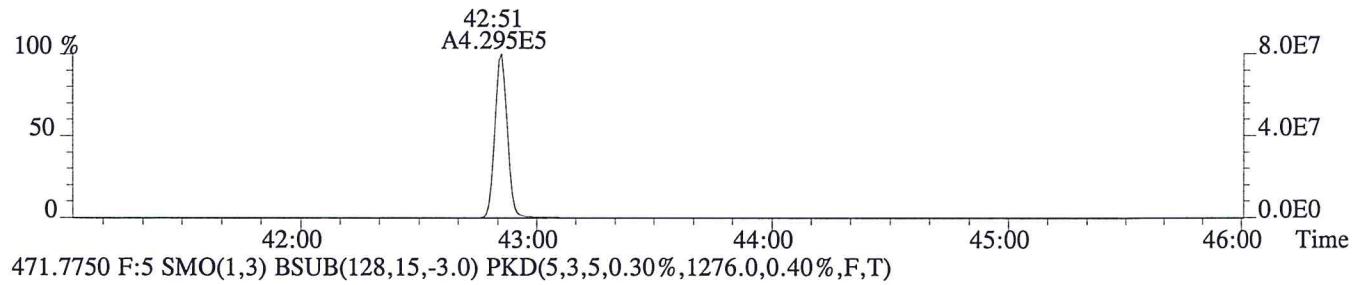
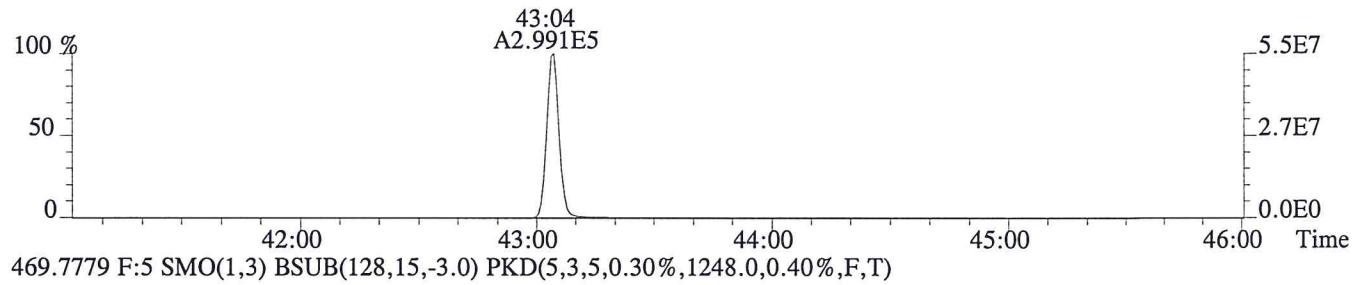
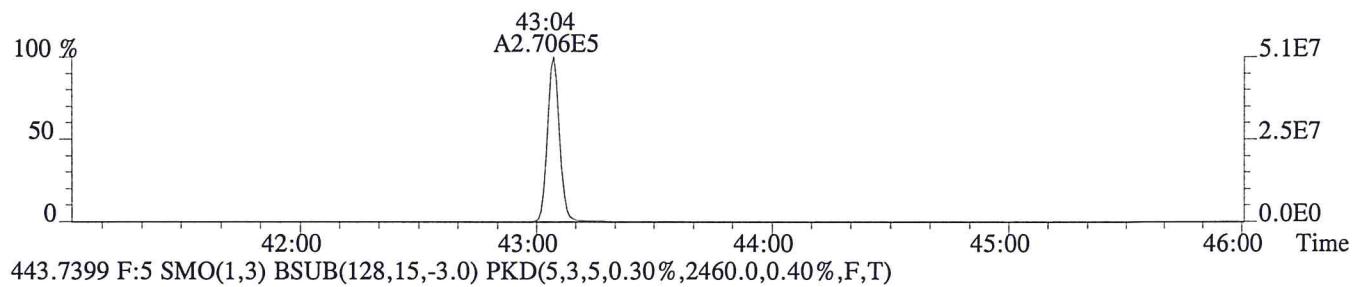
File:P600011 #1-213 Acq:19-AUG-2015 18:14:46 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:CS3 Second Source  
 407.7818 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,10444.0,0.50%,F,T)



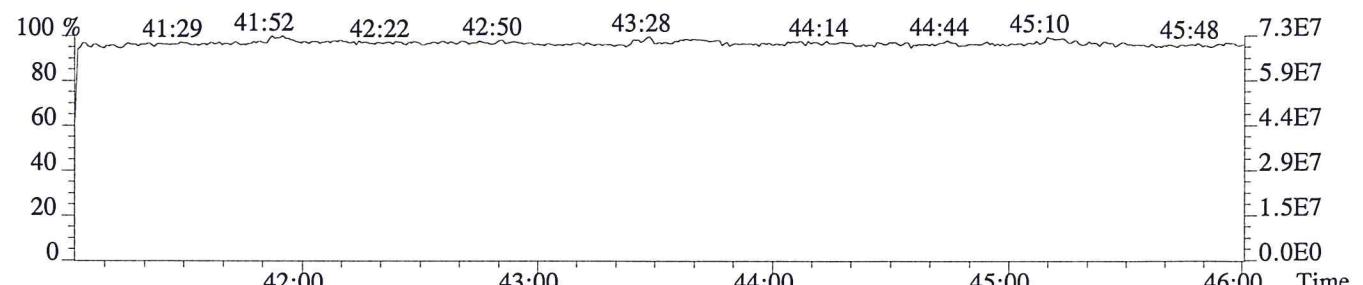
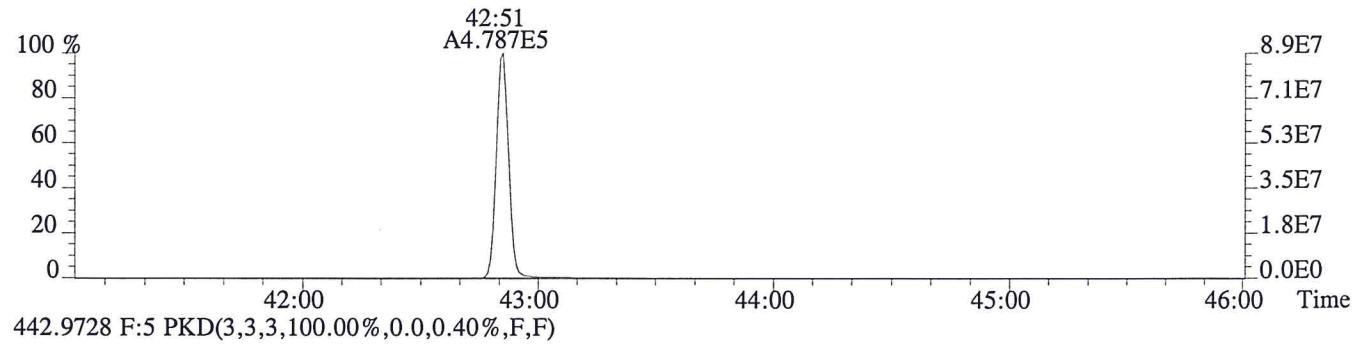
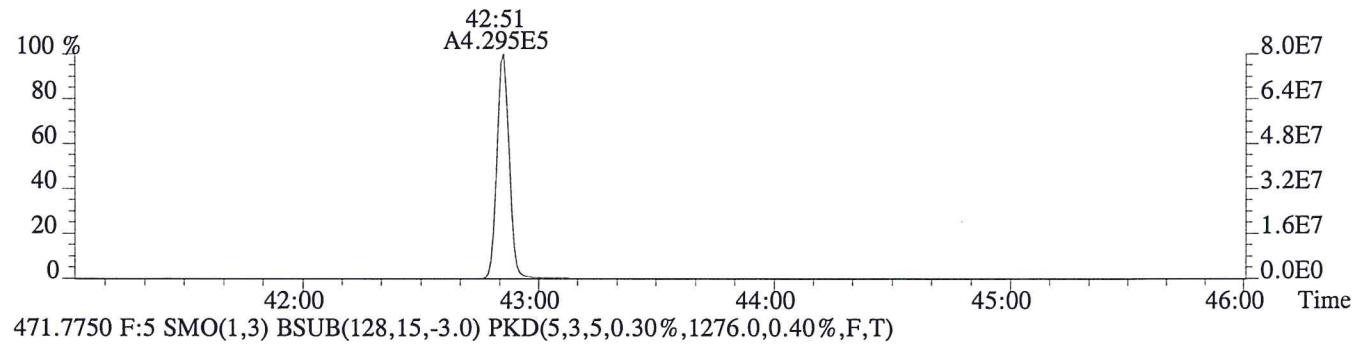
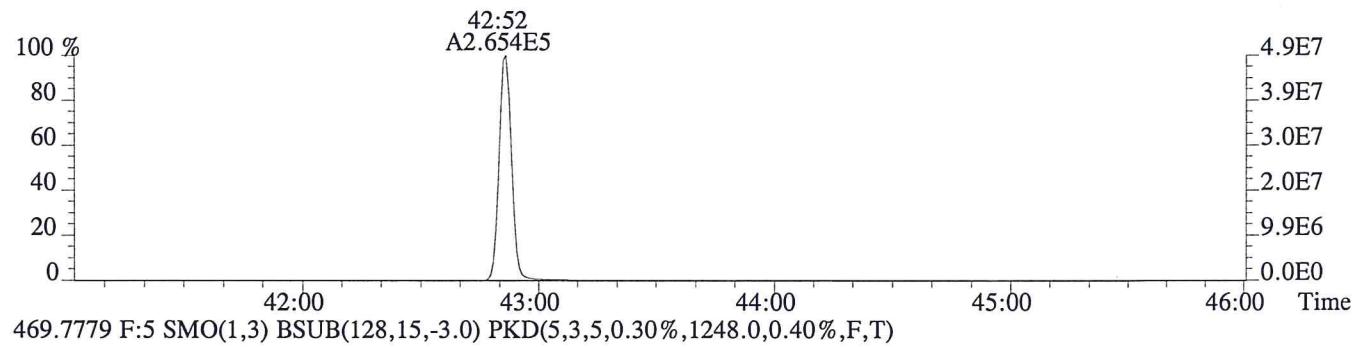
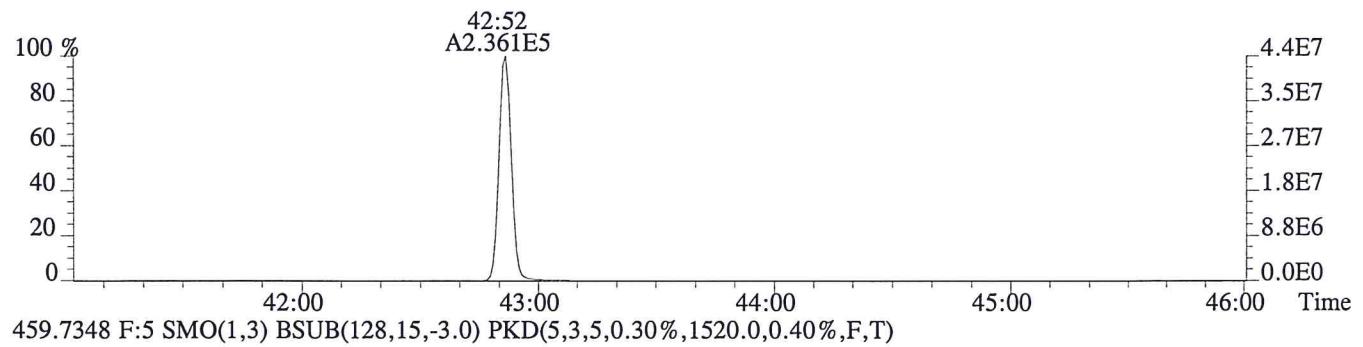
File:P600011 #1-213 Acq:19-AUG-2015 18:14:46 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:CS3 Second Source  
 423.7766 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,3240.0,0.40%,F,T)



File:P600011 #1-448 Acq:19-AUG-2015 18:14:46 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:CS3 Second Source  
 441.7428 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1248.0,0.40%,F,T)



File:P600011 #1-448 Acq:19-AUG-2015 18:14:46 Probe EI+ Magnet SIR VG BioTech Mass spectf  
 Sample#1 Exp:CS3 Second Source  
 457.7377 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1128.0,0.40%,F,T)





## ALS Burlington PCB Data

**ALS Environmental - Houston HRMS**  
10450 Stancliff Rd., Suite 320, Houston TX 77099  
Phone (713)266-1599 Fax (713)266-0130  
[www.alsglobal.com](http://www.alsglobal.com)

	Accrediting Body: Accreditation: Accrediting Standard	CALA CALA ISO 17025:2005	NJ DEP NELAP Primary TNI:2009	TX TCEQ NELAP 2nd <sup>ary</sup> TNI:2009	NY DOH NELAP 2nd <sup>ary</sup> TNI:2009	PA DEP NELAP 2nd <sup>ary</sup> TNI:2009	CA DPH NELAP 2nd <sup>ary</sup> TNI:2009	GA EPD NELAP 2nd <sup>ary</sup> TNI:2009	VA DGS NELAP 2nd <sup>ary</sup> TNI:2009	PJLA US DoD & PJLA ISO 17025:2005 & TNI:2009	WA DOE 2nd <sup>ary</sup> ISO 17025:2005	
<b>Target Analytes</b>	<b>Matrices</b>	<b>Accreditations by Method</b>										
<b>PCDD/F</b>	Drinking Water	1613B, 8290A	1613B (TCDD)	1613B (TCDD)	1613B (TCDD)	1613B (TCDD)	-	1613B (TCDD)	1613B (TCDD)	1613B, 8290A	-	
	Non-Potable Water	1613B, 8290A	1613B	1613B, 8290A	1613B (TCDD)	1613	8290	8290		1613B	1613B, 8290A	
	Soil/Sediment/Solid	1613B, 8290A	8290A	8290A	-	-	-			8290A	1613B, 8290A	
	Biota/Tissue	1613B*, 8290A	-	-	-	-	-			1613B, 8290A	1613B	
	Stack/Ambient Air	M23, 0023A, TO-9A	M23, 0023A, TO-9A	-	M23	-	-		TO-9A	M23, 0023A, TO-9A	-	
<b>PCB</b>	Soil/Sediment/Solid	1668A&C	1668A	1668A	1668A	-	-		1668A	1668A&C	1668C	
	Non-Potable Water	-	1668A	-	1668A	-	-		1668A	1668A&C	-	
	Stack/Ambient Air	-	TO-4A	-	-	-	-		-	1668A&C	-	
	Biota/Tissue	1668A&C*, 680	-	-	-	-	-		-	1668A&C	1668C	
<b>PAH</b>	Stack/Ambient Air	CARB 429, TO-13A	-	-	-	-	-	-	-	-	-	
	Soil/Sediment/Solid	mod C429	-	-	-	-	-	-	-	-	-	
	Biota/Tissue	mod C429 HR*	-	-	-	-	-	-	-	-	-	
<b>BDPE</b>	Drinking Water	1614A	-	-	-	-	-	-	-	-	-	
	Non-Potable Water	1614A	1614	-	-	-	-	-	-	-	-	
	Soil/Sediment/Solid	1614A	1614	-	-	-	-	-	-	-	1614A	
	Biota/Tissue/Food	1614A*	-	-	-	-	-	-	-	-	1614A	
	Stack/Ambient Air	1614A	-	-	-	-	-	-	-	-	-	
<b>NDMA</b>	Water	GC/HRMS	-	-	-	-	-	-	-	-	-	
	Soil/Sediment/Solid	GC/HRMS	-	-	-	-	-	-	-	-	-	
<b>OCP</b>	Soil/Sediment/Solid	mod 1699	-	-	-	-	-	-	-	-	-	
	Biota/Tissue	mod 680	-	-	-	-	-	-	-	-	-	
	Ambient Air	-	TO-4A	-	-	-	-	-	-	-	-	
<b>PCN</b>	Soil/Sediment/Solid	GC/HRMS	-	-	-	-	-	-	-	-	-	
	Biota/Tissue	GC/HRMS	-	-	-	-	-	-	-	-	-	
<b>VOC-VOST</b>	Stack/Ambient Air	5041A/8260B	5041A/8260B	-	-	-	-	-	-	-	-	
<b>SVOC</b>	Soil & Chem/Stack	-	8270D	-	-	-	-	-	-	-	-	
<b>ICPMS Elements</b>	Stack/Ambient Air	M29 & 0060/6020A	M29 & 0060/6020A	-	-	-	-	-	-	-	-	
	Soil/Sediment/Solid	6020A	-	-	-	-	-	-	-	-	-	
	Biota/Tissue	6020A, USP 233	-	-	-	-	-	-	-	-	-	
<b>Mercury</b>	Stack/Ambient Air	M29/101A, ASTM D6784	M29, M101A	M101A	M29 (Pb)	-	-	-	-	-	-	
	Soil/Sediment/Solid	7471B	-	-	-	-	-	-	-	-	-	
	Biota/Tissue	7471B	-	-	-	-	-	-	-	-	-	
<b>Acid Gases (HF, HCl, HBr)</b>	Stack Air	M26, M26A, 9057	M26, M26A, 9057	-	-	-	-	-	-	-	-	
<b>Acid Gases (Cl<sub>2</sub>, Br<sub>2</sub>)</b>	Stack Air	M26, M26A, 9057	M26, M26A	-	-	-	-	-	-	-	-	
<b>Ammonia</b>	Stack Air	CTM-027	CTM-027	-	-	-	-	-	-	-	-	
<b>SOx</b>	Stack Air	mod M6/M8 (via IC)										
<b>NOx</b>	Stack Air	M7A										
<b>Particulate</b>	Stack Air	-	M5, M5D	M5, M5D, M17	M5	-	-	-	-	-	-	

\* Accredited with CALA under the Food and Agricultural Product program specialty

CALA = Canadian Association for Laboratory Accreditation

NJ DEP = State of New Jersey Department of Environmental Protection

PJLA = Perry Johnson Laboratory Accreditation, Inc.

US DoD = US Department of Defence

NELAP = US National Environmental Laboratory Accreditation Program

TNI:2009 = The current lab accreditation standard of The NELAC Institute (TNI)

ISO 17025:2005 = The current standard from the International Organization of Standardization (ISO) for testing and calibration laboratories

GA EPD = Georgia Environmental Protection Division

CA DPH = State of California Department of Public Health

NY DOH = State of New York Department of Health

PA DEP = State of Pennsylvania Department of Environmental Protection

TX TCEQ = State of Texas Commission of Environmental Quality

VA DGS = Commonwealth of Virginia Department of General Services

WA DOE = State of Washington Department of Ecology

#### Statement of Qualifications

February 2015; Rev 28



1435 Norjohn Court, Unit 1, Burlington, ON, Canada L7L 0E6

## SVOC DATA PACKAGE

### Client Project Information

Project ID: SJRC (b) (6)  
Project Description: SAN JACINTO RIVER COALITION  
Contact: Arthi Kodur

### ALSE Project Information

Project ID: ALS800

Contact: Whitney Davis  
Submission ID(s): L1685414

A handwritten signature in black ink, appearing to read "R.A. Myrick".

Final Package Review by:

Date Reviewed: 16-Dec-15

## SVOC DATA PACKAGE

### SECTION 1: PROJECT NARRATIVE

**ALSE Project Information**

Project ID: ALS800

 Contact: Whitney Davis  
 Submission ID(s): L1685414

**Analytical Method:** PCB Congeners by EPA 1668A

**Client Project Information**

Project ID: SJRC(b)(6)

 Project Description: SAN JACINTO RIVER COALITION  
 Contact: Arthi Kodur

ALS Sample ID	Client Sample Descriptions	Matrix	Date Sampled	Date Received	Date Extracted	Date Analyzed
L1685414-1	E1500973-002	Water	2-Dec-15	3-Dec-15	3-Dec-15	8-Dec-15
WG2225462-1	Method Blank	Qc	n/a	n/a	3-Dec-15	8-Dec-15
WG2225462-2	Laboratory Control Sample	Qc	n/a	n/a	3-Dec-15	8-Dec-15

**Comments and Notes:**
**a) Sample Integrity:**

The sample was received in good condition at 2.5 degrees C.

**b) Instrumental Analysis:**

The sample was extracted and analyzed under ALS batch WG2191808. Losses of the lower molecular weight PCBs were observed and additional sample was collected by the client for re-extraction. The sample was re-extracted under ALS batch WG2225462.

The opening Continuing Calibration Verification (CCV) failed high for recovery of 13C12-PCB-54. The closing CCV was also high but within the method acceptance limits. This indicates a potential for high bias in the reported 13C12-PCB-54 extraction standard recoveries. However, all extraction standard recoveries were within the method acceptance limits with or without correction for this bias. Since the native tetra LCS recoveries were within normal control limits, there is no evidence of compromise to the reported tetrachlorobiphenyl results based upon the high CCV of the 13C12-PCB-54. Furthermore there were no significant pentachlorobiphenyls observed in the sample therefore there can be no significant bias to the native target pentachlorobiphenyl results.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this data package (hardcopy and/or electronic version) has been authorized by the Laboratory Manager or his designee, as verified by the following signature.



Ron McLeod, Director, Air Toxics &amp; Special Chemistries

16-Dec-15

Date



1435 Norjohn Court, Unit 1, Burlington, ON, Canada L7L 0E6

## **SVOC DATA PACKAGE**

### **SECTION 2: DATA SUMMARY REPORT**



1435 Norjohn Court, Unit 1, Burlington, ON, Canada L7L 0E6  
Phone: 905-331-3111, FAX: 905-331-4567

## Certificate of Analysis

<b>ALS Project Contact:</b>	Whitney Davis	<b>Client Name:</b>	ALS Group USA, Corp.
<b>ALS Project ID:</b>	ALS800	<b>Client Address:</b>	10450 Stancliff Road, Suite 210
<b>ALS WO#:</b>	L1685414		Houston, TX
<b>Date of Report</b>	21-Dec-15		77099
<b>Date of Sample Receipt</b>	3-Dec-15	<b>Client Contact:</b>	Arthi Kodur
		<b>Client Project ID:</b>	SJRC (b) (6) SAN JACINTO RIVER COALITION

**COMMENTS:** PCB Congeners by EPA 1668A

PCB Congener Group Totals and Total PCB are a sum of detected values, including EMPC values, consistent with USEPA CLP SOW CBC1.2

The opening Continuing Calibration Verification (CCV) failed high for recovery of 13C12-PCB-54. The closing CCV was also high but within the method acceptance limits. This indicates a potential for high bias in the reported 13C12-PCB-54 extraction standard recoveries. However, all extraction standard recoveries were within the method acceptance limits with or without correction for this bias. Since the native tetra LCS recoveries were within normal control limits, there is no evidence of compromise to the reported tetrachlorobiphenyl results based upon the high CCV of the 13C12-PCB-54. Furthermore there were no significant pentachlorobiphenyls observed in the sample therefore there can be no significant bias to the native target pentachlorobiphenyl results.

A handwritten signature in black ink, appearing to read "R. McLeod".

Ron McLeod, PhD  
Technical Director

Results in this certificate relate only to the samples as submitted to the laboratory.

This report shall not be reproduced, except in full, without the written permission of ALS Canada Ltd.

ALS Life sciences	
Sample Analysis summary Report	
Sample Name	E1500973-002
ALS Sample ID	L1685414-1
Sample Size	1.04
Sample size units	L
Percent Moisture	n/a
Sample Matrix	Water
Sampling Date	2-Dec-15
Extraction Date	3-Dec-15
Target Analytes	pg/L
PCB-001	<0.58
PCB-002	<0.31
PCB-003	<0.35
PCB-004	<2.0
PCB-010	<1.4
PCB-009	<1.8
PCB-007	<1.6
PCB-006	<1.5
PCB-005	<1.9
PCB-008	<1.3
PCB-014	<1.7
PCB-011	<12
PCB-012/013	<1.7
PCB-015	<2.0
PCB-019	<0.60
PCB-018/030	1.38
PCB-017	<0.74
PCB-027	<0.41
PCB-024	<0.41
PCB-016	<0.59
PCB-032	<0.36
PCB-034	<0.49
PCB-023	<0.40
PCB-026/029	<0.51
PCB-025	<0.37
PCB-031	<1.1
PCB-020/028	<1.5
PCB-021/033	0.712
PCB-022	<0.64
PCB-036	<0.40
PCB-039	<0.46
PCB-038	<0.42
PCB-035	<0.46
PCB-037	<0.51
PCB-054	<0.32
PCB-050/053	<0.44
PCB-045/051	<0.52
PCB-046	<0.54
PCB-052	1.85
PCB-073	<0.35
PCB-043	<0.52
PCB-049/069	0.635
PCB-048	<0.46
PCB-044/047/065	<2.4
PCB-059/062/075	<0.33
PCB-042	<0.44
PCB-040/041/071	<0.48
PCB-064	0.519
PCB-072	<0.56
PCB-068	<0.44
PCB-057	<0.55
PCB-058	<0.58
PCB-067	<0.42
PCB-063	<0.50
PCB-061/070/074/076	<0.97
PCB-066	0.788
PCB-055	<0.50
PCB-056	<0.52
PCB-060	<0.50
PCB-080	<0.45
PCB-079	<0.45
PCB-078	<0.50
PCB-081	<0.47
PCB-077	<0.47
PCB-104	<0.19
PCB-096	<0.17
PCB-103	<0.31
PCB-094	<0.33
PCB-095	1.11
PCB-093/098/100/102	<0.31

ALS Life sciences	
Sample Analysis summary Report	
Sample Name	E1500973-002
ALS Sample ID	L1685414-1
Sample Size	1.04
Sample size units	L
Percent Moisture	n/a
Sample Matrix	Water
Sampling Date	2-Dec-15
Extraction Date	3-Dec-15
Target Analytes	pg/L
PCB-088/091	<0.33
PCB-084	<0.37
PCB-089	<0.34
PCB-121	<0.22
PCB-092	<0.34
PCB-090/101/113	1.29
PCB-083/099	<0.52
PCB-112	<0.21
PCB-086/087/097/108/119/125	<0.53
PCB-085/110/115/116/117	<0.23
PCB-082	<0.47
PCB-111	<0.22
PCB-120	<0.21
PCB-107/124	<0.19
PCB-109	<0.19
PCB-123	<0.21
PCB-106	<0.17
PCB-118	1.08
PCB-122	<0.21
PCB-114	<0.19
PCB-105	<0.20
PCB-127	<0.18
PCB-126	<0.18
PCB-155	<0.15
PCB-152	<0.17
PCB-150	<0.13
PCB-136	<0.16
PCB-145	<0.16
PCB-148	<0.21
PCB-135/151	<0.77
PCB-154	<0.16
PCB-144	<0.20
PCB-147/149	<1.1
PCB-134/143	<0.27
PCB-139/140	<0.23
PCB-131	<0.26
PCB-142	<0.25
PCB-132	<0.26
PCB-133	<0.26
PCB-165	<0.20
PCB-146	<0.41
PCB-161	<0.18
PCB-153/168	2.68
PCB-141	<0.24
PCB-130	<0.28
PCB-137/164	<0.27
PCB-129/138/163	3.06
PCB-160	<0.17
PCB-158	<0.15
PCB-128/166	<0.19
PCB-159	<0.16
PCB-162	<0.15
PCB-167	<0.16
PCB-156/157	<0.23
PCB-169	<0.17
PCB-188	<0.14
PCB-179	<0.18
PCB-184	<0.16
PCB-176	<0.17
PCB-186	<0.17
PCB-178	<0.23
PCB-175	<0.21
PCB-187	<0.85
PCB-182	<0.20
PCB-183	0.413
PCB-185	<0.21
PCB-174	<0.23
PCB-177	0.404
PCB-181	<0.21
PCB-171/173	<0.23
PCB-172	<0.22

# ALS Life sciences

## Sample Analysis summary Report

Sample Name	E1500973-002
ALS Sample ID	L1685414-1
Sample Size	1.04
Sample size units	L
Percent Moisture	n/a
Sample Matrix	Water
Sampling Date	2-Dec-15
Extraction Date	3-Dec-15
<b>Target Analytes</b>	<b>pg/L</b>
PCB-192	<0.17
PCB-180/193	1.76
PCB-191	<0.16
PCB-170	<0.71
PCB-190	<0.15
PCB-189	<0.28
PCB-202	<0.12
PCB-201	<0.12
PCB-204	<0.11
PCB-197	<0.11
PCB-200	<0.11
PCB-198/199	<0.15
PCB-196	<0.16
PCB-203	<0.14
PCB-195	<0.16
PCB-194	<0.52
PCB-205	<0.17
PCB-208	<0.49
PCB-207	<0.49
PCB-206	<0.94
PCB-209	<0.90
<b>Extraction Standards</b>	<b>% Rec</b>
13C12-PCB-001	37
13C12-PCB-003	36
13C12-PCB-004	43
13C12-PCB-015	36
13C12-PCB-019	50
13C12-PCB-037	57
13C12-PCB-054	51
13C12-PCB-081	68
13C12-PCB-077	67
13C12-PCB-104	63
13C12-PCB-123	77
13C12-PCB-118	77
13C12-PCB-114	81
13C12-PCB-105	79
13C12-PCB-126	86
13C12-PCB-155	77
13C12-PCB-167	75
13C12-PCB-156/157	78
13C12-PCB-169	80
13C12-PCB-188	84
13C12-PCB-189	66
13C12-PCB-202	102
13C12-PCB-205	75
13C12-PCB-208	88
13C12-PCB-206	84
13C12-PCB-209	76
<b>Cleanup Standards</b>	
13C12-PCB-028	56
13C12-PCB-111	84
13C12-PCB-178	96

ALS Life sciences	
Sample Analysis summary Report	
Sample Name	E1500973-002
ALS Sample ID	L1685414-1
Sample Size	1.04
Sample size units	L
Percent Moisture	n/a
Sample Matrix	Water
Sampling Date	2-Dec-15
Extraction Date	3-Dec-15
Target Analytes	pg/L
<b>Homologue Group Totals</b>	
Total MonoCB	0.580
Total DiCB	12.0
Total TriCB	6.07
Total TetraCB	7.68
Total PentaCB	4.53
Total HexaCB	8.52
Total HeptaCB	4.14
Total OctaCB	0.520
Total NonaCB	<0.49
DecaCB	0.900
Total PCB	44.9
<b>Toxic Equivalency - (WHO 2005)</b>	
Mid Point PCB TEQ	0.0117
<b>Toxic Equivalency - (WHO 1998)</b>	
Mid Point PCB TEQ	0.0102

# ALS Life sciences

## Quality Control Summary Report

Sample Name	Method Blank
ALS Sample ID	WG2225462-1
Sample Size	1
Sample size units	L
Percent Moisture	n/a
Sample Matrix	OC
Sampling Date	n/a
Extraction Date	3-Dec-15
<b>Target Analytes</b>	<b>pg/L</b>
PCB-001	1.52
PCB-002	<1.3
PCB-003	<0.47
PCB-004	<2.6
PCB-010	<1.8
PCB-009	<2.2
PCB-007	<8.8
PCB-006	<1.9
PCB-005	<6.1
PCB-008	<1.7
PCB-014	<2.2
PCB-011	19.0
PCB-012/013	<2.1
PCB-015	<2.4
PCB-019	<0.89
PCB-018/030	<1.3
PCB-017	0.970
PCB-027	<0.44
PCB-024	<0.44
PCB-016	<0.64
PCB-032	<0.39
PCB-034	<0.70
PCB-023	<0.58
PCB-026/029	<0.73
PCB-025	<0.54
PCB-031	<1.5
PCB-020/028	<1.4
PCB-021/033	0.980
PCB-022	<0.65
PCB-036	<0.58
PCB-039	<0.66
PCB-038	<0.61
PCB-035	<0.66
PCB-037	<0.70
PCB-054	<0.44
PCB-050/053	<0.61
PCB-045/051	<0.65
PCB-046	<0.74
PCB-052	1.71
PCB-073	<0.47
PCB-043	<0.71
PCB-049/069	<0.51
PCB-048	<0.63
PCB-044/047/065	1.90
PCB-059/062/075	<0.45
PCB-042	<0.60
PCB-040/041/071	<0.65
PCB-064	<0.41
PCB-072	<0.62
PCB-068	<0.48
PCB-057	<0.61
PCB-058	<0.64
PCB-067	<0.46
PCB-063	<0.55
PCB-061/070/074/076	<0.56
PCB-066	<0.57
PCB-055	<0.55
PCB-056	<0.58
PCB-060	<0.56
PCB-080	<0.50
PCB-079	<0.50
PCB-078	<0.55
PCB-081	<0.52
PCB-077	<0.53
PCB-104	<0.18
PCB-096	<0.17
PCB-103	<0.31
PCB-094	<0.33
PCB-095	<0.36
PCB-093/098/100/102	<0.30

# ALS Life sciences

## Quality Control Summary Report

Sample Name	Method Blank
ALS Sample ID	WG2225462-1
Sample Size	1
Sample size units	L
Percent Moisture	n/a
Sample Matrix	OC
Sampling Date	n/a
Extraction Date	3-Dec-15
<b>Target Analytes</b>	<b>pg/L</b>
PCB-088/091	<0.33
PCB-084	<0.37
PCB-089	<0.34
PCB-121	<0.21
PCB-092	<0.33
PCB-090/101/113	<0.69
PCB-083/099	<0.74
PCB-112	<0.21
PCB-086/087/097/108/119/125	<0.25
PCB-085/110/115/116/117	0.760
PCB-082	<0.46
PCB-111	<0.21
PCB-120	<0.20
PCB-107/124	<0.31
PCB-109	<0.31
PCB-123	<0.35
PCB-106	<0.28
PCB-118	<0.68
PCB-122	<0.34
PCB-114	<0.32
PCB-105	<0.45
PCB-127	<0.29
PCB-126	<0.30
PCB-155	<0.12
PCB-152	<0.14
PCB-150	<0.11
PCB-136	<0.13
PCB-145	<0.13
PCB-148	<0.17
PCB-135/151	<0.17
PCB-154	<0.13
PCB-144	<0.17
PCB-147/149	0.440
PCB-134/143	<0.25
PCB-139/140	<0.22
PCB-131	<0.24
PCB-142	<0.23
PCB-132	<0.24
PCB-133	<0.24
PCB-165	<0.18
PCB-146	<0.20
PCB-161	<0.17
PCB-153/168	<1.1
PCB-141	<0.22
PCB-130	<0.26
PCB-137/164	<0.24
PCB-129/138/163	<0.75
PCB-160	<0.15
PCB-158	<0.14
PCB-128/166	<0.18
PCB-159	<0.15
PCB-162	<0.14
PCB-167	<0.15
PCB-156/157	<0.20
PCB-169	<0.16
PCB-188	<0.13
PCB-179	<0.16
PCB-184	<0.13
PCB-176	<0.15
PCB-186	<0.15
PCB-178	<0.20
PCB-175	<0.18
PCB-187	<0.27
PCB-182	<0.17
PCB-183	<0.19
PCB-185	<0.18
PCB-174	<0.19
PCB-177	<0.20
PCB-181	<0.18
PCB-171/173	<0.20
PCB-172	<0.19

# ALS Life sciences

## Quality Control Summary Report

**Sample Name**

Method Blank

**ALS Sample ID**

WG2225462-1

**Sample Size**

1

**Sample size units**

L

**Percent Moisture**

n/a

**Sample Matrix**

OC

**Sampling Date**

n/a

**Extraction Date**

3-Dec-15

**Target Analytes**

pg/L

PCB-192	<0.15
PCB-180/193	<0.57
PCB-191	<0.14
PCB-170	<0.19
PCB-190	<0.13
PCB-189	<0.17
PCB-202	<0.13
PCB-201	<0.13
PCB-204	<0.12
PCB-197	<0.12
PCB-200	<0.12
PCB-198/199	<0.17
PCB-196	<0.17
PCB-203	<0.16
PCB-195	<0.18
PCB-194	<0.47
PCB-205	<0.18
PCB-208	<0.60
PCB-207	<0.60
PCB-206	<1.2
PCB-209	<1.1

**Extraction Standards**

% Rec

13C12-PCB-001	30
13C12-PCB-003	30
13C12-PCB-004	36
13C12-PCB-015	37
13C12-PCB-019	41
13C12-PCB-037	60
13C12-PCB-054	48
13C12-PCB-081	68
13C12-PCB-077	65
13C12-PCB-104	65
13C12-PCB-123	72
13C12-PCB-118	73
13C12-PCB-114	72
13C12-PCB-105	73
13C12-PCB-126	80
13C12-PCB-155	78
13C12-PCB-167	73
13C12-PCB-156/157	76
13C12-PCB-169	79
13C12-PCB-188	75
13C12-PCB-189	64
13C12-PCB-202	94
13C12-PCB-205	69
13C12-PCB-208	78
13C12-PCB-206	74
13C12-PCB-209	64

**Cleanup Standards**

13C12-PCB-028	58
13C12-PCB-111	83
13C12-PCB-178	95

# ALS Life sciences

## Quality Control Summary Report

Sample Name

Method Blank

ALS Sample ID

WG2225462-1

Sample Size

1

Sample size units

L

Percent Moisture

n/a

Sample Matrix

OC

Sampling Date

n/a

Extraction Date

3-Dec-15

Target Analytes

pg/L

### Homologue Group Totals

Total MonoCB	2.82
Total DiCB	33.9
Total TriCB	6.15
Total TetraCB	3.61
Total PentaCB	3.32
Total HexaCB	2.29
Total HeptaCB	0.840
Total OctaCB	0.470
Total NonaCB	<0.60
DecaCB	1.10
Total PCB	54.5

### Toxic Equivalency - (WHO 2005)

Mid Point PCB TEQ	0.0176
-------------------	--------

### Toxic Equivalency - (WHO 1998)

Mid Point PCB TEQ	0.0161
-------------------	--------

# ALS Life sciences

## Sample Analysis summary Report

Sample Name	Laboratory Control Sample
ALS Sample ID	WG2225462-2
Sample Size	1
Sample size units	n/a
Percent Moisture	n/a
Sample Matrix	QC
Sampling Date	n/a
Extraction Date	3-Dec-15
<b>Target Analytes</b>	<b>% Rec</b>
PCB-001	114
PCB-003	106
PCB-004	103
PCB-015	100
PCB-019	108
PCB-037	94
PCB-054	106
PCB-081	107
PCB-077	101
PCB-104	102
PCB-123	114
PCB-118	113
PCB-114	112
PCB-105	111
PCB-126	109
PCB-155	105
PCB-167	106
PCB-156/157	105
PCB-169	105
PCB-188	106
PCB-189	116
PCB-202	111
PCB-205	114
PCB-208	112
PCB-206	128
PCB-209	119
<b>Extraction Standards</b>	<b>% Rec</b>
13C12-PCB-001	28
13C12-PCB-003	29
13C12-PCB-004	35
13C12-PCB-015	33
13C12-PCB-019	44
13C12-PCB-037	57
13C12-PCB-054	46
13C12-PCB-081	67
13C12-PCB-077	65
13C12-PCB-104	71
13C12-PCB-123	74
13C12-PCB-118	72
13C12-PCB-114	74
13C12-PCB-105	75
13C12-PCB-126	84
13C12-PCB-155	82
13C12-PCB-167	78
13C12-PCB-156/157	82
13C12-PCB-169	85
13C12-PCB-188	79
13C12-PCB-189	70
13C12-PCB-202	102
13C12-PCB-205	78
13C12-PCB-208	88
13C12-PCB-206	87
13C12-PCB-209	79
<b>Cleanup Standards</b>	
13C12-PCB-028	53
13C12-PCB-111	80
13C12-PCB-178	95

# ALS Life sciences

## Sample Analysis summary Report

**Sample Name**

CCV

CCV

**ALS Sample ID**

H5-15-CCV-574

H5-15-CCV-575

Sample Size

1

Sample size units

n/a

Percent Moisture

n/a

Sample Matrix

QC

Sampling Date

n/a

Extraction Date

n/a

**Target Analytes**

% Rec

% Rec

PCB-001	104	103
PCB-003	101	100
PCB-004	94	92
PCB-015	96	100
PCB-019	98	96
PCB-037	99	107
PCB-054	98	96
PCB-081	102	102
PCB-077	98	98
PCB-104	102	99
PCB-123	103	102
PCB-118	102	105
PCB-114	102	101
PCB-105	102	103
PCB-126	102	102
PCB-155	102	99
PCB-167	99	99
PCB-156/157	98	98
PCB-169	99	99
PCB-188	99	98
PCB-189	101	103
PCB-202	101	100
PCB-205	104	103
PCB-208	108	107
PCB-206	110	110
PCB-209	104	103

**Extraction Standards**

% Rec

% Rec

13C12-PCB-001	85	87
13C12-PCB-003	86	84
13C12-PCB-004	99	103
13C12-PCB-015	77	77
13C12-PCB-019	124	137
13C12-PCB-037	94	81
13C12-PCB-054	155	146
13C12-PCB-081	100	92
13C12-PCB-077	93	87
13C12-PCB-104	106	104
13C12-PCB-123	106	103
13C12-PCB-118	104	98
13C12-PCB-114	106	101
13C12-PCB-105	106	102
13C12-PCB-126	118	93
13C12-PCB-155	120	112
13C12-PCB-167	102	100
13C12-PCB-156/157	106	100
13C12-PCB-169	106	95
13C12-PCB-188	106	110
13C12-PCB-189	88	79
13C12-PCB-202	138	146
13C12-PCB-205	101	112
13C12-PCB-208	112	113
13C12-PCB-206	111	125
13C12-PCB-209	105	116

**Cleanup Standards**

13C12-PCB-028	109	102
13C12-PCB-111	108	100
13C12-PCB-178	116	120

ALS Life sciences																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
Sample Analysis Report																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
Sample Name	E1500973-002		Sampling Date	2-Dec-15			Approved:																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
ALS Sample ID	L1685414-1		Extraction Date	3-Dec-15		L	E. Sabljic																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
Analysis Method	EPA 1668A		Sample Size	1.04		n/a	--e-signature--																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
Analysis Type	Sample		Percent Moisture	n/a				11-Dec-2015																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
Sample Matrix	Water		Split Ratio	1																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
<b>Run Information</b>		<b>Run 1</b>																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
Filename	5-151207C26		Run Date	08-Dec-15 07:38																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
Final Volume	25 uL		Dilution Factor	1																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
Analysis Units	pg/L		Instrument - Column	HRMS5 SPBOCTYL56284-02B																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
<table border="1"> <thead> <tr> <th>Target Analytes</th> <th>TEF (WHO 2005)</th> <th>Ret. Time</th> <th>Conc. pg/L</th> <th>EDL pg/L</th> <th>EMPC pg/L</th> <th>Flags</th> <th>LQL</th> <th></th> </tr> </thead> <tbody> <tr><td>PCB-001</td><td></td><td>8.85</td><td>&lt;0.58</td><td>0.27</td><td>J.R.</td><td>0.58</td><td>24</td><td></td></tr> <tr><td>PCB-002</td><td>NoI</td><td>NoI</td><td>&lt;0.31</td><td>0.31</td><td>U</td><td></td><td>24</td><td></td></tr> <tr><td>PCB-003</td><td>NoI</td><td>NoI</td><td>&lt;0.35</td><td>0.35</td><td>U</td><td></td><td>24</td><td></td></tr> <tr><td>PCB-004</td><td>NoI</td><td>NoI</td><td>&lt;2.0</td><td>2.0</td><td>U</td><td></td><td>24</td><td></td></tr> <tr><td>PCB-010</td><td>NoI</td><td>NoI</td><td>&lt;1.4</td><td>1.4</td><td>U</td><td></td><td>24</td><td></td></tr> <tr><td>PCB-009</td><td>NoI</td><td>NoI</td><td>&lt;1.8</td><td>1.8</td><td>U</td><td></td><td>24</td><td></td></tr> <tr><td>PCB-007</td><td>NoI</td><td>NoI</td><td>&lt;1.6</td><td>1.6</td><td>U</td><td></td><td>24</td><td></td></tr> <tr><td>PCB-006</td><td>NoI</td><td>NoI</td><td>&lt;1.5</td><td>1.5</td><td>U</td><td></td><td>24</td><td></td></tr> <tr><td>PCB-005</td><td>NoI</td><td>NoI</td><td>&lt;1.9</td><td>1.9</td><td>U</td><td></td><td>24</td><td></td></tr> <tr><td>PCB-008</td><td>NoI</td><td>NoI</td><td>&lt;1.3</td><td>1.3</td><td>U</td><td></td><td>24</td><td></td></tr> <tr><td>PCB-014</td><td>NoI</td><td>NoI</td><td>&lt;1.7</td><td>1.7</td><td>U</td><td></td><td>24</td><td></td></tr> <tr><td>PCB-011</td><td></td><td>13.84</td><td>&lt;12</td><td>1.8</td><td>J.R.</td><td>12</td><td>24</td><td></td></tr> <tr><td>PCB-012/013</td><td>NoI</td><td>NoI</td><td>&lt;1.7</td><td>1.7</td><td>U</td><td></td><td>24</td><td></td></tr> <tr><td>PCB-015</td><td>NoI</td><td>NoI</td><td>&lt;2.0</td><td>2.0</td><td>U</td><td></td><td>24</td><td></td></tr> <tr><td>PCB-019</td><td>NoI</td><td>NoI</td><td>&lt;0.60</td><td>0.60</td><td>U</td><td></td><td>24</td><td></td></tr> <tr><td>PCB-018/030</td><td></td><td>13.67</td><td>1.38</td><td>0.49</td><td>J</td><td></td><td>24</td><td></td></tr> <tr><td>PCB-017</td><td></td><td>13.92</td><td>&lt;0.74</td><td>0.59</td><td>M,J,R.</td><td>0.74</td><td>24</td><td></td></tr> <tr><td>PCB-027</td><td>NoI</td><td>NoI</td><td>&lt;0.41</td><td>0.41</td><td>U</td><td></td><td>24</td><td></td></tr> <tr><td>PCB-024</td><td>NoI</td><td>NoI</td><td>&lt;0.41</td><td>0.41</td><td>U</td><td></td><td>24</td><td></td></tr> <tr><td>PCB-016</td><td>NoI</td><td>NoI</td><td>&lt;0.59</td><td>0.59</td><td>U</td><td></td><td>24</td><td></td></tr> <tr><td>PCB-032</td><td>NoI</td><td>NoI</td><td>&lt;0.36</td><td>0.36</td><td>U</td><td></td><td>24</td><td></td></tr> <tr><td>PCB-034</td><td>NoI</td><td>NoI</td><td>&lt;0.49</td><td>0.49</td><td>U</td><td></td><td>24</td><td></td></tr> <tr><td>PCB-023</td><td>NoI</td><td>NoI</td><td>&lt;0.40</td><td>0.40</td><td>U</td><td></td><td>24</td><td></td></tr> <tr><td>PCB-026/029</td><td>NoI</td><td>NoI</td><td>&lt;0.51</td><td>0.51</td><td>U</td><td></td><td>24</td><td></td></tr> <tr><td>PCB-025</td><td>NoI</td><td>NoI</td><td>&lt;0.37</td><td>0.37</td><td>U</td><td></td><td>24</td><td></td></tr> <tr><td>PCB-031</td><td></td><td>15.77</td><td>&lt;1.1</td><td>0.43</td><td>J,R.</td><td>1.1</td><td>24</td><td></td></tr> <tr><td>PCB-020/028</td><td></td><td>15.95</td><td>&lt;1.5</td><td>0.46</td><td>J,R.</td><td>1.5</td><td>24</td><td></td></tr> <tr><td>PCB-021/033</td><td></td><td>16.08</td><td>0.712</td><td>0.39</td><td>J,B</td><td></td><td>24</td><td></td></tr> <tr><td>PCB-022</td><td></td><td>16.33</td><td>&lt;0.64</td><td>0.45</td><td>J,R.</td><td>0.64</td><td>24</td><td></td></tr> <tr><td>PCB-036</td><td>NoI</td><td>NoI</td><td>&lt;0.40</td><td>0.40</td><td>U</td><td></td><td>24</td><td></td></tr> <tr><td>PCB-039</td><td>NoI</td><td>NoI</td><td>&lt;0.46</td><td>0.46</td><td>U</td><td></td><td>24</td><td></td></tr> <tr><td>PCB-038</td><td>NoI</td><td>NoI</td><td>&lt;0.42</td><td>0.42</td><td>U</td><td></td><td>24</td><td></td></tr> <tr><td>PCB-035</td><td>NoI</td><td>NoI</td><td>&lt;0.46</td><td>0.46</td><td>U</td><td></td><td>24</td><td></td></tr> <tr><td>PCB-037</td><td>NoI</td><td>NoI</td><td>&lt;0.51</td><td>0.51</td><td>U</td><td></td><td>24</td><td></td></tr> <tr><td>PCB-054</td><td>NoI</td><td>NoI</td><td>&lt;0.32</td><td>0.32</td><td>U</td><td></td><td>24</td><td></td></tr> <tr><td>PCB-050/053</td><td>NoI</td><td>NoI</td><td>&lt;0.44</td><td>0.44</td><td>U</td><td></td><td>24</td><td></td></tr> <tr><td>PCB-045/051</td><td></td><td>16.03</td><td>&lt;0.52</td><td>0.47</td><td>M,J,R.</td><td>0.52</td><td>24</td><td></td></tr> <tr><td>PCB-046</td><td>NoI</td><td>NoI</td><td>&lt;0.54</td><td>0.54</td><td>U</td><td></td><td>24</td><td></td></tr> <tr><td>PCB-052</td><td></td><td>16.94</td><td>1.85</td><td>0.50</td><td>J,B</td><td></td><td>24</td><td></td></tr> <tr><td>PCB-073</td><td>NoI</td><td>NoI</td><td>&lt;0.35</td><td>0.35</td><td>U</td><td></td><td>24</td><td></td></tr> <tr><td>PCB-043</td><td>NoI</td><td>NoI</td><td>&lt;0.52</td><td>0.52</td><td>U</td><td></td><td>24</td><td></td></tr> <tr><td>PCB-049/069</td><td></td><td>17.21</td><td>0.635</td><td>0.37</td><td>J</td><td></td><td>24</td><td></td></tr> <tr><td>PCB-048</td><td>NoI</td><td>NoI</td><td>&lt;0.46</td><td>0.46</td><td>U</td><td></td><td>24</td><td></td></tr> <tr><td>PCB-044/047/065</td><td></td><td>17.51</td><td>&lt;2.4</td><td>0.39</td><td>M,J,R.</td><td>2.4</td><td>24</td><td></td></tr> <tr><td>PCB-059/062/075</td><td>NoI</td><td>NoI</td><td>&lt;0.33</td><td>0.33</td><td>U</td><td></td><td>24</td><td></td></tr> <tr><td>PCB-042</td><td>NoI</td><td>NoI</td><td>&lt;0.44</td><td>0.44</td><td>U</td><td></td><td>24</td><td></td></tr> <tr><td>PCB-040/041/071</td><td>NoI</td><td>NoI</td><td>&lt;0.48</td><td>0.48</td><td>U</td><td></td><td>24</td><td></td></tr> <tr><td>PCB-064</td><td></td><td>18.20</td><td>0.519</td><td>0.30</td><td>M,J</td><td></td><td>24</td><td></td></tr> <tr><td>PCB-072</td><td>NoI</td><td>NoI</td><td>&lt;0.56</td><td>0.56</td><td>U</td><td></td><td>24</td><td></td></tr> <tr><td>PCB-068</td><td>NoI</td><td>NoI</td><td>&lt;0.44</td><td>0.44</td><td>U</td><td></td><td>24</td><td></td></tr> <tr><td>PCB-057</td><td>NoI</td><td>NoI</td><td>&lt;0.55</td><td>0.55</td><td>U</td><td></td><td>24</td><td></td></tr> <tr><td>PCB-058</td><td>NoI</td><td>NoI</td><td>&lt;0.58</td><td>0.58</td><td>U</td><td></td><td>24</td><td></td></tr> <tr><td>PCB-067</td><td>NoI</td><td>NoI</td><td>&lt;0.42</td><td>0.42</td><td>U</td><td></td><td>24</td><td></td></tr> <tr><td>PCB-063</td><td>NoI</td><td>NoI</td><td>&lt;0.50</td><td>0.50</td><td>U</td><td></td><td>24</td><td></td></tr> <tr><td>PCB-061/070/074/076</td><td></td><td>19.53</td><td>&lt;0.97</td><td>0.50</td><td>M,J,R.</td><td>0.97</td><td>24</td><td></td></tr> <tr><td>PCB-066</td><td></td><td>19.72</td><td>0.788</td><td>0.52</td><td>M,J</td><td></td><td>24</td><td></td></tr> <tr><td>PCB-055</td><td>NoI</td><td>NoI</td><td>&lt;0.50</td><td>0.50</td><td>U</td><td></td><td>24</td><td></td></tr> <tr><td>PCB-056</td><td>NoI</td><td>NoI</td><td>&lt;0.52</td><td>0.52</td><td>U</td><td></td><td>24</td><td></td></tr> <tr><td>PCB-060</td><td>NoI</td><td>NoI</td><td>&lt;0.50</td><td>0.50</td><td>U</td><td></td><td>24</td><td></td></tr> <tr><td>PCB-080</td><td>NoI</td><td>NoI</td><td>&lt;0.45</td><td>0.45</td><td>U</td><td></td><td>24</td><td></td></tr> <tr><td>PCB-079</td><td>NoI</td><td>NoI</td><td>&lt;0.45</td><td>0.45</td><td>U</td><td></td><td>24</td><td></td></tr> <tr><td>PCB-078</td><td>NoI</td><td>NoI</td><td>&lt;0.50</td><td>0.50</td><td>U</td><td></td><td>24</td><td></td></tr> <tr><td>PCB-081</td><td>0.0003</td><td>NoI</td><td>&lt;0.47</td><td>0.47</td><td>U</td><td></td><td>24</td><td></td></tr> <tr><td>PCB-077</td><td>0.0001</td><td>NoI</td><td>&lt;0.47</td><td>0.47</td><td>U</td><td></td><td>24</td><td></td></tr> <tr><td>PCB-104</td><td>NoI</td><td>NoI</td><td>&lt;0.19</td><td>0.19</td><td>U</td><td></td><td>24</td><td></td></tr> <tr><td>PCB-096</td><td>NoI</td><td>NoI</td><td>&lt;0.17</td><td>0.17</td><td>U</td><td></td><td>24</td><td></td></tr> <tr><td>PCB-103</td><td>NoI</td><td>NoI</td><td>&lt;0.31</td><td>0.31</td><td>U</td><td></td><td>24</td><td></td></tr> <tr><td>PCB-094</td><td>NoI</td><td>NoI</td><td>&lt;0.33</td><td>0.33</td><td>U</td><td></td><td>24</td><td></td></tr> <tr><td>PCB-095</td><td></td><td>19.08</td><td>1.11</td><td>0.37</td><td>M,J</td><td></td><td>24</td><td></td></tr> <tr><td>PCB-093/098/100/102</td><td>NoI</td><td>NoI</td><td>&lt;0.31</td><td>0.31</td><td>U</td><td></td><td>24</td><td></td></tr> </tbody> </table>									Target Analytes	TEF (WHO 2005)	Ret. Time	Conc. pg/L	EDL pg/L	EMPC pg/L	Flags	LQL		PCB-001		8.85	<0.58	0.27	J.R.	0.58	24		PCB-002	NoI	NoI	<0.31	0.31	U		24		PCB-003	NoI	NoI	<0.35	0.35	U		24		PCB-004	NoI	NoI	<2.0	2.0	U		24		PCB-010	NoI	NoI	<1.4	1.4	U		24		PCB-009	NoI	NoI	<1.8	1.8	U		24		PCB-007	NoI	NoI	<1.6	1.6	U		24		PCB-006	NoI	NoI	<1.5	1.5	U		24		PCB-005	NoI	NoI	<1.9	1.9	U		24		PCB-008	NoI	NoI	<1.3	1.3	U		24		PCB-014	NoI	NoI	<1.7	1.7	U		24		PCB-011		13.84	<12	1.8	J.R.	12	24		PCB-012/013	NoI	NoI	<1.7	1.7	U		24		PCB-015	NoI	NoI	<2.0	2.0	U		24		PCB-019	NoI	NoI	<0.60	0.60	U		24		PCB-018/030		13.67	1.38	0.49	J		24		PCB-017		13.92	<0.74	0.59	M,J,R.	0.74	24		PCB-027	NoI	NoI	<0.41	0.41	U		24		PCB-024	NoI	NoI	<0.41	0.41	U		24		PCB-016	NoI	NoI	<0.59	0.59	U		24		PCB-032	NoI	NoI	<0.36	0.36	U		24		PCB-034	NoI	NoI	<0.49	0.49	U		24		PCB-023	NoI	NoI	<0.40	0.40	U		24		PCB-026/029	NoI	NoI	<0.51	0.51	U		24		PCB-025	NoI	NoI	<0.37	0.37	U		24		PCB-031		15.77	<1.1	0.43	J,R.	1.1	24		PCB-020/028		15.95	<1.5	0.46	J,R.	1.5	24		PCB-021/033		16.08	0.712	0.39	J,B		24		PCB-022		16.33	<0.64	0.45	J,R.	0.64	24		PCB-036	NoI	NoI	<0.40	0.40	U		24		PCB-039	NoI	NoI	<0.46	0.46	U		24		PCB-038	NoI	NoI	<0.42	0.42	U		24		PCB-035	NoI	NoI	<0.46	0.46	U		24		PCB-037	NoI	NoI	<0.51	0.51	U		24		PCB-054	NoI	NoI	<0.32	0.32	U		24		PCB-050/053	NoI	NoI	<0.44	0.44	U		24		PCB-045/051		16.03	<0.52	0.47	M,J,R.	0.52	24		PCB-046	NoI	NoI	<0.54	0.54	U		24		PCB-052		16.94	1.85	0.50	J,B		24		PCB-073	NoI	NoI	<0.35	0.35	U		24		PCB-043	NoI	NoI	<0.52	0.52	U		24		PCB-049/069		17.21	0.635	0.37	J		24		PCB-048	NoI	NoI	<0.46	0.46	U		24		PCB-044/047/065		17.51	<2.4	0.39	M,J,R.	2.4	24		PCB-059/062/075	NoI	NoI	<0.33	0.33	U		24		PCB-042	NoI	NoI	<0.44	0.44	U		24		PCB-040/041/071	NoI	NoI	<0.48	0.48	U		24		PCB-064		18.20	0.519	0.30	M,J		24		PCB-072	NoI	NoI	<0.56	0.56	U		24		PCB-068	NoI	NoI	<0.44	0.44	U		24		PCB-057	NoI	NoI	<0.55	0.55	U		24		PCB-058	NoI	NoI	<0.58	0.58	U		24		PCB-067	NoI	NoI	<0.42	0.42	U		24		PCB-063	NoI	NoI	<0.50	0.50	U		24		PCB-061/070/074/076		19.53	<0.97	0.50	M,J,R.	0.97	24		PCB-066		19.72	0.788	0.52	M,J		24		PCB-055	NoI	NoI	<0.50	0.50	U		24		PCB-056	NoI	NoI	<0.52	0.52	U		24		PCB-060	NoI	NoI	<0.50	0.50	U		24		PCB-080	NoI	NoI	<0.45	0.45	U		24		PCB-079	NoI	NoI	<0.45	0.45	U		24		PCB-078	NoI	NoI	<0.50	0.50	U		24		PCB-081	0.0003	NoI	<0.47	0.47	U		24		PCB-077	0.0001	NoI	<0.47	0.47	U		24		PCB-104	NoI	NoI	<0.19	0.19	U		24		PCB-096	NoI	NoI	<0.17	0.17	U		24		PCB-103	NoI	NoI	<0.31	0.31	U		24		PCB-094	NoI	NoI	<0.33	0.33	U		24		PCB-095		19.08	1.11	0.37	M,J		24		PCB-093/098/100/102	NoI	NoI	<0.31	0.31	U		24	
Target Analytes	TEF (WHO 2005)	Ret. Time	Conc. pg/L	EDL pg/L	EMPC pg/L	Flags	LQL																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
PCB-001		8.85	<0.58	0.27	J.R.	0.58	24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
PCB-002	NoI	NoI	<0.31	0.31	U		24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
PCB-003	NoI	NoI	<0.35	0.35	U		24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
PCB-004	NoI	NoI	<2.0	2.0	U		24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
PCB-010	NoI	NoI	<1.4	1.4	U		24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
PCB-009	NoI	NoI	<1.8	1.8	U		24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
PCB-007	NoI	NoI	<1.6	1.6	U		24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
PCB-006	NoI	NoI	<1.5	1.5	U		24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
PCB-005	NoI	NoI	<1.9	1.9	U		24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
PCB-008	NoI	NoI	<1.3	1.3	U		24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
PCB-014	NoI	NoI	<1.7	1.7	U		24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
PCB-011		13.84	<12	1.8	J.R.	12	24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
PCB-012/013	NoI	NoI	<1.7	1.7	U		24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
PCB-015	NoI	NoI	<2.0	2.0	U		24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
PCB-019	NoI	NoI	<0.60	0.60	U		24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
PCB-018/030		13.67	1.38	0.49	J		24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
PCB-017		13.92	<0.74	0.59	M,J,R.	0.74	24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
PCB-027	NoI	NoI	<0.41	0.41	U		24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
PCB-024	NoI	NoI	<0.41	0.41	U		24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
PCB-016	NoI	NoI	<0.59	0.59	U		24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
PCB-032	NoI	NoI	<0.36	0.36	U		24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
PCB-034	NoI	NoI	<0.49	0.49	U		24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
PCB-023	NoI	NoI	<0.40	0.40	U		24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
PCB-026/029	NoI	NoI	<0.51	0.51	U		24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
PCB-025	NoI	NoI	<0.37	0.37	U		24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
PCB-031		15.77	<1.1	0.43	J,R.	1.1	24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
PCB-020/028		15.95	<1.5	0.46	J,R.	1.5	24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
PCB-021/033		16.08	0.712	0.39	J,B		24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
PCB-022		16.33	<0.64	0.45	J,R.	0.64	24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
PCB-036	NoI	NoI	<0.40	0.40	U		24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
PCB-039	NoI	NoI	<0.46	0.46	U		24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
PCB-038	NoI	NoI	<0.42	0.42	U		24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
PCB-035	NoI	NoI	<0.46	0.46	U		24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
PCB-037	NoI	NoI	<0.51	0.51	U		24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
PCB-054	NoI	NoI	<0.32	0.32	U		24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
PCB-050/053	NoI	NoI	<0.44	0.44	U		24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
PCB-045/051		16.03	<0.52	0.47	M,J,R.	0.52	24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
PCB-046	NoI	NoI	<0.54	0.54	U		24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
PCB-052		16.94	1.85	0.50	J,B		24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
PCB-073	NoI	NoI	<0.35	0.35	U		24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
PCB-043	NoI	NoI	<0.52	0.52	U		24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
PCB-049/069		17.21	0.635	0.37	J		24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
PCB-048	NoI	NoI	<0.46	0.46	U		24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
PCB-044/047/065		17.51	<2.4	0.39	M,J,R.	2.4	24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
PCB-059/062/075	NoI	NoI	<0.33	0.33	U		24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
PCB-042	NoI	NoI	<0.44	0.44	U		24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
PCB-040/041/071	NoI	NoI	<0.48	0.48	U		24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
PCB-064		18.20	0.519	0.30	M,J		24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
PCB-072	NoI	NoI	<0.56	0.56	U		24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
PCB-068	NoI	NoI	<0.44	0.44	U		24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
PCB-057	NoI	NoI	<0.55	0.55	U		24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
PCB-058	NoI	NoI	<0.58	0.58	U		24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
PCB-067	NoI	NoI	<0.42	0.42	U		24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
PCB-063	NoI	NoI	<0.50	0.50	U		24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
PCB-061/070/074/076		19.53	<0.97	0.50	M,J,R.	0.97	24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
PCB-066		19.72	0.788	0.52	M,J		24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
PCB-055	NoI	NoI	<0.50	0.50	U		24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
PCB-056	NoI	NoI	<0.52	0.52	U		24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
PCB-060	NoI	NoI	<0.50	0.50	U		24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
PCB-080	NoI	NoI	<0.45	0.45	U		24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
PCB-079	NoI	NoI	<0.45	0.45	U		24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
PCB-078	NoI	NoI	<0.50	0.50	U		24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
PCB-081	0.0003	NoI	<0.47	0.47	U		24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
PCB-077	0.0001	NoI	<0.47	0.47	U		24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
PCB-104	NoI	NoI	<0.19	0.19	U		24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
PCB-096	NoI	NoI	<0.17	0.17	U		24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
PCB-103	NoI	NoI	<0.31	0.31	U		24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
PCB-094	NoI	NoI	<0.33	0.33	U		24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
PCB-095		19.08	1.11	0.37	M,J		24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
PCB-093/098/100/102	NoI	NoI	<0.31	0.31	U		24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																

ALS Life sciences									
Sample Analysis Report									
Sample Name	E1500973-002	Sampling Date	2-Dec-15						
ALS Sample ID	L1685414-1	Extraction Date	3-Dec-15						
Analysis Method	EPA 1668A	Sample Size	1.04	L					
Analysis Type	Sample	Percent Moisture	n/a						
Sample Matrix	Water	Split Ratio	1						
Run Information	Run 1								
Filename	5-151207C26								
Run Date	08-Dec-15 07:38								
Final Volume	25 uL								
Dilution Factor	1								
Analysis Units	pg/L								
Instrument - Column	HRMS5 SPBOCTYL56284-02B								
Target Analytes	TEF (WHO 2005)	Ret.	Conc. pg/L	EDL pg/L	EMPC pg/L	Flags	LQL		
PCB-088/091		NoIInd	<0.33	0.33	U	24			
PCB-084		NoIInd	<0.37	0.37	U	24			
PCB-089		NoIInd	<0.34	0.34	U	24			
PCB-121		NoIInd	<0.22	0.22	U	24			
PCB-092		NoIInd	<0.34	0.34	U	24			
PCB-090/101/113	20.61		1.29	0.28	J	24			
PCB-083/099	20.91		<0.52	0.32	M,J,R	0.52	24		
PCB-112		NoIInd	<0.21	0.21	U	24			
CB-086/087/097/108/119/125	21.24		<0.53	0.26	M,J,R	0.53	24		
PCB-085/110/115/116/117		NoIInd	<0.23	0.23	U	24			
PCB-082		NoIInd	<0.47	0.47	U	24			
PCB-111		NoIInd	<0.22	0.22	U	24			
PCB-120		NoIInd	<0.21	0.21	U	24			
PCB-107/124		NoIInd	<0.19	0.19	U	24			
PCB-109		NoIInd	<0.19	0.19	U	24			
PCB-123	0.00003	NoIInd	<0.21	0.21	U	24			
PCB-106		NoIInd	<0.17	0.17	U	24			
PCB-118	0.00003	23.21	1.08	0.20	J	24			
PCB-122		NoIInd	<0.21	0.21	U	24			
PCB-114	0.00003	NoIInd	<0.19	0.19	U	24			
PCB-105	0.00003	NoIInd	<0.20	0.20	U	24			
PCB-127		NoIInd	<0.18	0.18	U	24			
PCB-126	0.1	NoIInd	<0.18	0.18	U	24			
PCB-155		NoIInd	<0.15	0.15	U	24			
PCB-152		NoIInd	<0.17	0.17	U	24			
PCB-150		NoIInd	<0.13	0.13	U	24			
PCB-136		NoIInd	<0.16	0.16	U	24			
PCB-145		NoIInd	<0.16	0.16	U	24			
PCB-148		NoIInd	<0.21	0.21	U	24			
PCB-135/151	22.13		<0.77	0.21	M,J,R	0.77	24		
PCB-154		NoIInd	<0.16	0.16	U	24			
PCB-144		NoIInd	<0.20	0.20	U	24			
PCB-147/149	22.61		<1.1	0.24	M,J,R	1.1	24		
PCB-134/143		NoIInd	<0.27	0.27	U	24			
PCB-139/140		NoIInd	<0.23	0.23	U	24			
PCB-131		NoIInd	<0.26	0.26	U	24			
PCB-142		NoIInd	<0.25	0.25	U	24			
PCB-132		NoIInd	<0.26	0.26	U	24			
PCB-133		NoIInd	<0.26	0.26	U	24			
PCB-165		NoIInd	<0.20	0.20	U	24			
PCB-146	23.84		<0.41	0.21	M,J,R	0.41	24		
PCB-161		NoIInd	<0.18	0.18	U	24			
PCB-153/168	24.15		2.68	0.19	J	24			
PCB-141		NoIInd	<0.24	0.24	U	24			
PCB-130		NoIInd	<0.28	0.28	U	24			
PCB-137/164	24.64		<0.27	0.26	J,R	0.27	24		
PCB-129/138/163	24.82		3.06	0.22	J	24			
PCB-160		NoIInd	<0.17	0.17	U	24			
PCB-158		NoIInd	<0.15	0.15	U	24			
PCB-128/166		NoIInd	<0.19	0.19	U	24			
PCB-159		NoIInd	<0.16	0.16	U	24			
PCB-162		NoIInd	<0.15	0.15	U	24			
PCB-167	0.00003		<0.16	0.16	U	24			
PCB-156/157	26.95		<0.23	0.21	J,R	0.23	48		
PCB-169	0.03	NoIInd	<0.17	0.17	U	24			
PCB-188		NoIInd	<0.14	0.14	U	24			
PCB-179		NoIInd	<0.18	0.18	U	24			
PCB-184		NoIInd	<0.16	0.16	U	24			
PCB-176		NoIInd	<0.17	0.17	U	24			
PCB-186		NoIInd	<0.17	0.17	U	24			
PCB-178		NoIInd	<0.23	0.23	U	24			
PCB-175		NoIInd	<0.21	0.21	U	24			
PCB-187	25.48		<0.85	0.18	J,R	0.85	24		
PCB-182		NoIInd	<0.20	0.20	U	24			
PCB-183	25.81		0.413	0.22	J	24			
PCB-185		NoIInd	<0.21	0.21	U	24			
PCB-174		NoIInd	<0.23	0.23	U	24			
PCB-177	26.19		0.404	0.23	J	24			
PCB-181		NoIInd	<0.21	0.21	U	24			
PCB-171/173		NoIInd	<0.23	0.23	U	24			
PCB-172		NoIInd	<0.22	0.22	U	24			

ALS Life sciences							
Sample Analysis Report							
Sample Name	E1500973-002	Sampling Date	2-Dec-15				
ALS Sample ID	L1685414-1	Extraction Date	3-Dec-15				
Analysis Method	EPA 1668A	Sample Size	1.04	L			
Analysis Type	Sample	Percent Moisture	n/a				
Sample Matrix	Water	Split Ratio	1				
Run Information	Run 1						
Filename	5-151207C26						
Run Date	08-Dec-15 07:38						
Final Volume	25 uL						
Dilution Factor	1						
Analysis Units	pg/L						
Instrument - Column	HRMS5 SPBOCTYL56284-02B						
Target Analytes	TEF (WHO 2005)	Ret. Time	Conc. pg/L	EDL pg/L	EMPC pg/L	Flags	LQL
PCB-192		NoFind	<0.17	0.17	U	24	
PCB-180/193	27.64		1.76	0.18	J	24	
PCB-191	NoFind	<0.16	0.16	U	24		
PCB-170	28.31	<0.71	0.22	J.R.	0.71	24	
PCB-190	NoFind	<0.15	0.15	U	24		
PCB-189	0.00003	NoFind	<0.28	0.28	U	24	
PCB-202	NoFind	<0.12	0.12	U	24		
PCB-201	NoFind	<0.12	0.12	U	24		
PCB-204	NoFind	<0.11	0.11	U	24		
PCB-197	NoFind	<0.11	0.11	U	24		
PCB-200	NoFind	<0.11	0.11	U	24		
PCB-198/199	NoFind	<0.15	0.15	U	24		
PCB-196	NoFind	<0.16	0.16	U	24		
PCB-203	NoFind	<0.14	0.14	U	24		
PCB-195	NoFind	<0.16	0.16	U	24		
PCB-194	30.98	<0.52	0.17	M.J.R.	0.52	24	
PCB-205	NoFind	<0.17	0.17	U	24		
PCB-208	NoFind	<0.49	0.49	U	24		
PCB-207	NoFind	<0.49	0.49	U	24		
PCB-206	NoFind	<0.94	0.94	U	24		
PCB-209	33.46	<0.90	0.18	J.R.	0.90	24	
Extraction Standards	pg	Time	% Rec	Limits			
13C12-PCB-001	2000	8.84	37	25-150			
13C12-PCB-003	2000	10.38	36	25-150			
13C12-PCB-004	2000	10.54	43	25-150			
13C12-PCB-015	2000	14.22	36	25-150			
13C12-PCB-019	2000	12.55	50	25-150			
13C12-PCB-037	2000	18.16	57	25-150			
13C12-PCB-054	2000	14.40	51	25-150			
13C12-PCB-081	2000	21.73	68	25-150			
13C12-PCB-077	2000	22.03	67	25-150			
13C12-PCB-104	2000	17.47	63	25-150			
13C12-PCB-123	2000	23.03	77	25-150			
13C12-PCB-118	2000	23.20	77	25-150			
13C12-PCB-114	2000	23.50	81	25-150			
13C12-PCB-105	2000	23.84	79	25-150			
13C12-PCB-126	2000	25.43	86	25-150			
13C12-PCB-155	2000	20.46	77	25-150			
13C12-PCB-167	2000	26.33	75	25-150			
13C12-PCB-156/157	4000	26.95	78	25-150			
13C12-PCB-169	2000	28.60	80	25-150			
13C12-PCB-188	2000	23.45	84	25-150			
13C12-PCB-189	2000	29.87	66	25-150			
13C12-PCB-202	2000	26.21	102	25-150			
13C12-PCB-205	2000	31.25	75	25-150			
13C12-PCB-208	2000	29.62	88	25-150			
13C12-PCB-206	2000	32.32	84	25-150			
13C12-PCB-209	2000	33.44	76	25-150			
Cleanup Standards							
13C12-PCB-028	2000	15.93	56	30-135			
13C12-PCB-111	2000	21.97	84	30-135			
13C12-PCB-178	2000	25.01	96	30-135			
Homologue Group Totals							
Total MonoCB		0.580	0.27	J	24		
Total DiCB		12.0	1.3	J	24		
Total TriCB		6.07	0.36	J	24		
Total TetraCB		7.68	0.30	J	24		
Total PentaCB		4.53	0.17	J	24		
Total HexaCB		8.52	0.13	J	24		
Total HeptaCB		4.14	0.14	J	24		
Total OctaCB		0.520	0.11	J	24		
Total NonaCB		<0.49	0.49	U	24		
DecaCB		0.900	0.18	J	24		
Total PCB		44.9		J			
Toxic Equivalency - (WHO 2005)							
Mid Point PCB TEO		0.0117					
Toxic Equivalency - (WHO 1998)							
Mid Point PCB TEO		0.0102					
EDL	Indicates the Estimated Detection Limit, based on the measured background noise for this target in this sample.						
TEF	Indicates the Toxic Equivalency Factor						
LOL	Indicates the Lower Quantification Limit, based on the lower limit of the calibrated range						
M	Indicates that a peak has been manually integrated.						
U	Indicates that this compound was not detected above the EDL.						
J	Indicates that the analyte was positively identified. The associated numerical result is an estimate.						
R	Indicates that the ion abundance ratio for this analyte did not meet the control limit. The reported value represents an estimated concentration.						
B	Indicates that this target was detected in the blank at greater than 10% of the sample concentration.						
EMPC	Estimated Maximum Possible Concentration						
Approved: E. Sabljic --e-signature-- 11-Dec-2015							



1435 Norjohn Court, Unit 1, Burlington, ON, Canada L7L 0E6

## **SVOC DATA PACKAGE**

### **SECTION 3: METHOD SUMMARY**

**PCB METHOD SUMMARY**  
**Method 1668**

**Introduction:**

This summary is to provide ALSE Burlington PCB method details in order to provide persons reviewing or validating this data package sufficient information to re-construct the sample calculation, data verification and review. It incorporates the analysis of PCBs via the following reference methods

US EPA Office of Water, Method 1668A  
US EPA Office of Water, Method 1668C

Any deviations to what is listed herein would be listed in the project narrative

To avoid the confusion and conflicting nomenclature within the methods, we have defined the labeled standards in terms relating to the time of addition to the sample or extract. Therefore;

The Field or Sampling Standards are added prior to field sampling  
The Extraction Standards are added prior to extraction  
The Clean-up Standards are added prior to extract clean-up  
The Injection Standards are added prior to extract injection.

**Calibration Standard Levels:**

Six levels of standard are available for calibration as listed in Table 1. The low point (the CS0) is below method requirements and therefore is optional

**Table 1. Concentration of CB congeners in calibration and calibration verification standards**

Solution concentration (ng/mL)

CB congener	IUPAC <sup>1</sup>	CS-0.2 (Hi sens) <sup>2</sup>	CS-1	CS-2	CS-3 (VER)	CS-4	CS-5
<b>Native Toxics/LOC</b>							
2-MoCB	1	0.2	1	5	50	400	2000
4-MoCB	3	0.2	1	5	50	400	2000
2,2'-DiCB	4	0.2	1	5	50	400	2000
4,4'-DiCB	15	0.2	1	5	50	400	2000
2,2',6-TrCB	19	0.2	1	5	50	400	2000
3,4,4'-TrCB	37	0.2	1	5	50	400	2000
2,2',6,6'-TeCB	54	0.2	1	5	50	400	2000
3,3',4,4'-TeCB	77	0.2	1	5	50	400	2000
3,4,4',5-TeCB	81	0.2	1	5	50	400	2000
2,2',4,6,6'-PeCB	104	0.2	1	5	50	400	2000
2,3,3',4,4'-PeCB	105	0.2	1	5	50	400	2000
2,3,4,4',5-PeCB	114	0.2	1	5	50	400	2000
2,3',4,4',5-PeCB	118	0.2	1	5	50	400	2000
2',3,4,4',5-PeCB	123	0.2	1	5	50	400	2000
3,3',4,4',5-PeCB	126	0.2	1	5	50	400	2000
2,2',4,4',6,6'-HxCB	155	0.2	1	5	50	400	2000
2,3,3',4,4',5-HxCB	156	0.2	1	5	50	400	2000
2,3,3',4,4',5-HxCB	157	0.2	1	5	50	400	2000
2,3',4,4',5,5'-HxCB	167	0.2	1	5	50	400	2000
3,3',4,4',5,5'-HxCB	169	0.2	1	5	50	400	2000
2,2',3,4',5,6,6'-HpCB	188	0.2	1	5	50	400	2000
2,3,3',4,4',5,5'-HpCB	189	0.2	1	5	50	400	2000
2,2',3,3',5,5',6,6'-OcCB	202	0.2	1	5	50	400	2000
2,3,3',4,4',5,5',6-OcCB	205	0.2	1	5	50	400	2000
2,2',3,3',4,4',5,5',6-NoCB	206	0.2	1	5	50	400	2000
2,2',3,3',4,4',5,5',6-NoCB	208	0.2	1	5	50	400	2000
DeCB 209	209	0.2	1	5	50	400	2000
<b>Labeled Toxics/LOC/window-defining</b>							
13C12-2-MoCB	1L	100	100	100	100	100	100
13C12-4-MoCB	3L	100	100	100	100	100	100
13C12-2,2'-DiCB	4L	100	100	100	100	100	100
13C12-4,4'-DiCB	15L	100	100	100	100	100	100
13C12-2,2',6-TrCB	19L	100	100	100	100	100	100
13C12-3,4,4'-TrCB	37L	100	100	100	100	100	100
13C12-2,2',6,6'-TeCB	54L	100	100	100	100	100	100
13C12-3,3',4,4'-TeCB	77L	100	100	100	100	100	100
13C12-3,4,4',5-TeCB	81L	100	100	100	100	100	100
13C12-2,2',4,6,6'-PeCB	104L	100	100	100	100	100	100
13C12-2,3,3',4,4'-PeCB	105L	100	100	100	100	100	100
13C12-2,3,4,4',5-PeCB	114L	100	100	100	100	100	100
13C12-2,3',4,4',5-PeCB	118L	100	100	100	100	100	100
13C12-2,3,4,4',5-PeCB	123L	100	100	100	100	100	100
13C12-3,3',4,4',5-PeCB	126L	100	100	100	100	100	100
13C12-2,2',4,4',6,6'-HxCB	155L	100	100	100	100	100	100
13C12-2,3,3',4,4',5-HxCB	156L	100	100	100	100	100	100
13C12-2,3,3',4,4',5-HxCB	157L	100	100	100	100	100	100
13C12-2,3',4,4',5,5'-HxCB	167L	100	100	100	100	100	100
13C12-3,3',4,4',5,5'-HxCB	169L	100	100	100	100	100	100
13C12-2,2',3,4',5,6,6'-HpCB	188L	100	100	100	100	100	100
13C12-2,3,3',4,4',5,5'-HpCB	189L	100	100	100	100	100	100
13C12-2,2',3,3',4,4',5,5',6-OcCB	202L	100	100	100	100	100	100
13C12-2,2',3,3',4,4',5,5',6-OcCB	205L	100	100	100	100	100	100
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L	100	100	100	100	100	100
13C12-2,2',3,3',4,4',5,5',6-NoCB	208L	100	100	100	100	100	100
13C12-DeCB 209L	209L	100	100	100	100	100	100
<b>Labelled clean-up</b>							
13C12-2,4,4'-TrCB	28L	100	100	100	100	100	100
13C12-2,3,3',5,5'-PeCB	111L	100	100	100	100	100	100
13C12-2,2',3,3',5,5'-PeCB	178L	100	100	100	100	100	100
<b>Labelled injection internal</b>							
13C12-2,5-DiCB	9L	100	100	100	100	100	100
13C12-2,2',5,5'-TeCB	52L	100	100	100	100	100	100
13C12-2,2',4,5,5'-PeCB	101L	100	100	100	100	100	100
13C12-2,2',3,4,4',5-HxCB	138L	100	100	100	100	100	100
13C12-2,2',3,3',4,4',5,5'-OcCB	194L	100	100	100	100	100	100

## Method Control Limits for 1668A

The initial and continuing calibration control limits for both methods are presented in Table 2 below. For the initial calibration CS1 and for each calibration verification CS3, the signal to noise ratio for each quantification ion for labelled and non-labelled analytes must be greater than or equal to 10:1

**Table 2A. QC acceptance criteria for chlorinated biphenyls in VER, IPR, OPR, and samples<sup>1</sup>**

Congener	IUPAC Number <sup>2</sup>	Test conc (ng/mL)	VER (%)	IPR		OPR (%)	Labelled compound recovery in samples (%)
				RSD (%)	X (%)		
2-MoCB	1	50	70-130	40	60-140	50-150	
4-MoCB	3	50	70-130	40	60-140	50-150	
2,2'-DiCB	4	50	70-130	40	60-140	50-150	
4,4'-DiCB	15	50	70-130	40	60-140	50-150	
2,2'6-TrCB	19	50	70-130	40	60-140	50-150	
3,4,4'-TrCB	37	50	70-130	40	60-140	50-150	
2,2'6,6'TeCB	54	50	70-130	40	60-140	50-150	
3,3',4,4'-TeCB	77	50	70-130	40	60-140	50-150	
3,4,4',5-TeCB	81	50	70-130	40	60-140	50-150	
2,2',4,6,6'-PeCB	104	50	70-130	40	60-140	50-150	
2,3,3',4,4'-PeCB	105	50	70-130	40	60-140	50-150	
2,3,4,4',5-PeCB	114	50	70-130	40	60-140	50-150	
2,3',4,4',5-PeCB	118	50	70-130	40	60-140	50-150	
2',3,4,4',5-PeCB	123	50	70-130	40	60-140	50-150	
3,3',4,4',5-PeCB	126	50	70-130	40	60-140	50-150	
2,2',4,4',6,6'-HxCB	155	50	70-130	40	60-140	50-150	
2,3,3',4,4',5-HxCB <sup>3</sup>	156	50	70-130	40	60-140	50-150	
2,3,3',4,4',5-HxCB <sup>3</sup>	157	50	70-130	40	60-140	50-150	
2,3',4,4',5,5'-HxCB	167	50	70-130	40	60-140	50-150	
3,3',4,4',5,5'-HxCB	169	50	70-130	40	60-140	50-150	
2,2',3,4',5,6,6'-HpCB	188	50	70-130	40	60-140	50-150	
2,3,3',4,4',5,5'-HpCB	189	50	70-130	40	60-140	50-150	
2,2',3,3',5,5',6,6'-OcCB	202	50	70-130	40	60-140	50-150	
2,3,3',4,4',5,5',6-OcCB	205	50	70-130	40	60-140	50-150	
2,2',3,3',4,4',5,5',6-NoCB	206	50	70-130	40	60-140	50-150	
2,2',3,3',4,5,5',6,6'-NoCB	208	50	70-130	40	60-140	50-150	
DeCB	209	50	70-130	40	60-140	50-150	
13C12-2-MoCB	1L	100	50-150	50	35-135	30-140	25-150
13C12-4-MoCB	3L	100	50-150	50	35-135	30-140	25-150
13C12-2,2'-DiCB	4L	100	50-150	50	35-135	30-140	25-150
13C12-2,4'-DiCB	15L	100	50-150	50	35-135	30-140	25-150
13C12-2,2',6-TrCB	19L	100	50-150	50	35-135	30-140	25-150
13C12-3,4,4'-TrCB	37L	100	50-150	50	35-135	30-140	25-150
13C12-2,2',6,6'-TeCB	54L	100	50-150	50	35-135	30-140	25-150
13C12-3,3',4,4'-TCB	77L	100	50-150	50	35-135	30-140	25-150
13C12-3,4,4',5-TeCB	81L	100	50-150	50	35-135	30-140	25-150
13C12-2,2',4,6,6'-PeCB	104L	100	50-150	50	35-135	30-140	25-150
13C12-2,3,3',4,4'-PeCB	105L	100	50-150	50	35-135	30-140	25-150
13C12-2,3,4,4',5-PeCB	114L	100	50-150	50	35-135	30-140	25-150
13C12-2,3',4,4',5-PeCB	118L	100	50-150	50	35-135	30-140	25-150
13C12-2',3,4,4',5-PeCB	123L	100	50-150	50	35-135	30-140	25-150
13C12-3,3',4,4',5-PeCB	126L	100	50-150	50	35-135	30-140	25-150
13C12-2,2',4,4',6,6'-HxCB	155L	100	50-150	50	35-135	30-140	25-150
13C12-2,3,3',4,4',5-HxCB <sup>3</sup>	156L	100	50-150	50	35-135	30-140	25-150
13C12-2,3,3',4,4',5-HxCB <sup>3</sup>	157L	100	50-150	50	35-135	30-140	25-150
13C12-2,3',4,4',5,5'-HxCB	167L	100	50-150	50	35-135	30-140	25-150
13C12-3,3',4,4',5,5'-HxCB	169L	100	50-150	50	35-135	30-140	25-150
13C12-2,2',3,4,4',5,5',6-HpCB	188L	100	50-150	50	35-135	30-140	25-150
13C12-2',3,3',4,4',5,5',6-HpCB	189L	100	50-150	50	35-135	30-140	25-150
13C12-2,2',3,3',5,5',6,6'-OcCB	202L	100	50-150	50	35-135	30-140	25-150
13C12-2,3,3',4,4',5,5',6-OcCB	205L	100	50-150	50	35-135	30-140	25-150
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L	100	50-150	50	35-135	30-140	25-150
13C12-2,2',3,3',4,5,5',6,6'-NoCB	208L	100	50-150	50	35-135	30-140	25-150
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L	100	50-150	50	35-135	30-140	25-150
<b>Cleanup standard</b>							
13C12-2,4,4'-TrCB	28L	100	60-130	45	45-120	40-125	30-135
13C12-2,3,3',5,5'-PeCB	111L	100	60-130	45	45-120	40-125	30-135
13C12-2,2',3,3',5,5',6-HpCB	178L	100	60-130	45	45-120	40-125	30-135

1. QC acceptance criteria for IPR, OPR, and samples based on a 20  $\mu$ L extract final volume

2. Suffix "L" indicates labelled compound.

3. PCBs 156 and 157 are tested as the sum of two concentrations

## Method Control Limits for 1668C

The initial and continuing calibration control limits for both methods are presented in Table 2 below. For the initial calibration CS1 and for each calibration verification CS3, the signal to noise ratio for each quantification ion for labelled and non-labelled analytes must be greater than or equal to 10:1

**Table 2A. QC acceptance criteria for chlorinated biphenyls in VER, IPR, OPR, and samples<sup>1</sup>**

Congener	IUPAC Number <sup>2</sup>	Test conc (ng/mL)	VER (%)	IPR		OPR (%)	Labelled compound recovery in samples (%)
				RSD (%)	X (%)		
2-MoCB	1	50	75 - 125	25	70 - 130	60 - 135	
4-MoCB	3	50	75 - 125	25	70 - 130	60 - 135	
2,2'-DiCB	4	50	75 - 125	25	70 - 130	60 - 135	
4,4'-DiCB	15	50	75 - 125	25	70 - 130	60 - 135	
2,2'6-TrCB	19	50	75 - 125	25	70 - 130	60 - 135	
3,4,4'-TrCB	37	50	75 - 125	25	70 - 130	60 - 135	
2,2'6,6'-TeCB	54	50	75 - 125	25	70 - 130	60 - 135	
3,3',4,4'-TeCB	77	50	75 - 125	25	70 - 130	60 - 135	
3,4,4',5-TeCB	81	50	75 - 125	25	70 - 130	60 - 135	
2,2',4,6,6'-PeCB	104	50	75 - 125	25	70 - 130	60 - 135	
2,3,3',4,4'-PeCB	105	50	75 - 125	25	70 - 130	60 - 135	
2,3,4,4',5-PeCB	114	50	75 - 125	25	70 - 130	60 - 135	
2,3',4,4',5-PeCB	118	50	75 - 125	25	70 - 130	60 - 135	
2',3,4,4',5-PeCB	123	50	75 - 125	25	70 - 130	60 - 135	
3,3',4,4',5-PeCB	126	50	75 - 125	25	70 - 130	60 - 135	
2,2',4,4',6,6'-HxCB	155	50	75 - 125	25	70 - 130	60 - 135	
2,3,3',4,4',5-HxCB <sup>3</sup>	156	50	75 - 125	25	70 - 130	60 - 135	
2,3,3',4,4',5-HxCB <sup>3</sup>	157	50	75 - 125	25	70 - 130	60 - 135	
2,3',4,4',5,5'-HxCB	167	50	75 - 125	25	70 - 130	60 - 135	
3,3',4,4',5,5'-HxCB	169	50	75 - 125	25	70 - 130	60 - 135	
2,2',3,4,5,6,6'-HpCB	188	50	75 - 125	25	70 - 130	60 - 135	
2,3,3',4,4',5,5'-HpCB	189	50	75 - 125	25	70 - 130	60 - 135	
2,2',3,3',5,5',6,6'-OcCB	202	50	75 - 125	25	70 - 130	60 - 135	
2,3,3',4,4',5,5',6-OcCB	205	50	75 - 125	25	70 - 130	60 - 135	
2,2',3,3',4,4',5,5',6-NoCB	206	50	75 - 125	25	70 - 130	60 - 135	
2,2',3,3',4,5,5',6,6'-NoCB	208	50	75 - 125	25	70 - 130	60 - 135	
DeCB	209	50	75 - 125	25	70 - 130	60 - 135	
13C12-2-MoCB	1L	100	50 - 145	70	20 - 135	5 - 145	5 - 145
13C12-4-MoCB	3L	100	50 - 145	70	20 - 135	5 - 145	5 - 145
13C12-2,2'-DiCB	4L	100	50 - 145	70	20 - 135	5 - 145	5 - 145
13C12-4,4'-DiCB	15L	100	50 - 145	70	20 - 135	5 - 145	5 - 145
13C12-2,2',6-TrCB	19L	100	50 - 145	70	20 - 135	5 - 145	5 - 145
13C12-3,4,4'-TrCB	37L	100	50 - 145	70	20 - 135	5 - 145	5 - 145
13C12-2,2',6,6'-TeCB	54L	100	50 - 145	70	20 - 135	5 - 145	5 - 145
13C12-3,3',4,4'-TeCB	77L	100	50 - 145	50	45 - 135	10 - 145	10 - 145
13C12-3,4,4',5-TeCB	81L	100	50 - 145	50	45 - 135	10 - 145	10 - 145
13C12-2,2',4,6,6'-PeCB	104L	100	50 - 145	50	45 - 135	10 - 145	10 - 145
13C12-2,3,3',4,4'-PeCB	105L	100	50 - 145	50	45 - 135	10 - 145	10 - 145
13C12-2,3,4,4',5-PeCB	114L	100	50 - 145	50	45 - 135	10 - 145	10 - 145
13C12-2,3',4,4',5-PeCB	118L	100	50 - 145	50	45 - 135	10 - 145	10 - 145
13C12-2,3,4,4',5-PeCB	123L	100	50 - 145	50	45 - 135	10 - 145	10 - 145
13C12-3,3',4,4',5-PeCB	126L	100	50 - 145	50	45 - 135	10 - 145	10 - 145
13C12-2,2',4,4',6,6'-HxCB	155L	100	50 - 145	50	45 - 135	10 - 145	10 - 145
13C12-2,3,3',4,4',5-HxCB <sup>3</sup>	156L	100	50 - 145	50	45 - 135	10 - 145	10 - 145
13C12-2,3,3',4,4',5-HxCB <sup>3</sup>	157L	100	50 - 145	50	45 - 135	10 - 145	10 - 145
13C12-2,3',4,4',5,5'-HxCB	167L	100	50 - 145	50	45 - 135	10 - 145	10 - 145
13C12-3,3',4,4',5,5'-HxCB	169L	100	50 - 145	50	45 - 135	10 - 145	10 - 145
13C12-2,2',3,4,4',5,5'-HpCB	188L	100	50 - 145	50	45 - 135	10 - 145	10 - 145
13C12-2',3,3',4,4',5,5'-HpCB	189L	100	50 - 145	50	45 - 135	10 - 145	10 - 145
13C12-2,2',3,3',5,5',6,6'-OcCB	202L	100	50 - 145	50	45 - 135	10 - 145	10 - 145
13C12-2,3,3',4,4',5,5',6-OcCB	205L	100	50 - 145	50	45 - 135	10 - 145	10 - 145
13C12-2,2',3,3',4,4',5,5',6-NoCB	206L	100	50 - 145	50	45 - 135	10 - 145	10 - 145
13C12-2,2',3,3',4,5,5',6-NoCB	208L	100	50 - 145	50	45 - 135	10 - 145	10 - 145
13C12-2,2',3,3',4,4',5,5',6,6'-DeCB	209L	100	50 - 145	50	45 - 135	10 - 145	10 - 145
<b>Cleanup standards</b>							
13C12-2,4,4'-TrCB	28L	100	65 - 135	70	20 - 135	5 - 145	5 - 145
13C12-2,3,3',5,5'-PeCB	111L	100	75 - 125	50	45 - 135	10 - 145	10 - 145
13C12-2,2',3,3',5,5',6-HpCB	178L	100	75 - 125	50	45 - 135	10 - 145	10 - 145

1. QC acceptance criteria for IPR, OPR, and samples based on a 20-µL extract final volume

2. Suffix "L" indicates labeled compound.

3. CBs 156/157 and 156L/157L are tested as the sum of the two congeners

**Reporting Limits:**

Unless indicated in the otherwise, the PCB results are reported down to 2.5:1 signal to noise for each isomer grouping for each extract injection. This is consistent to SW846 8290 defined protocols (i.e. EDL or Estimated Detection Limit) and is commonly applied throughout the industry to any or all the HRMS performance based methods applicable to this method summary.

**Method Blank:**

The Method Blank must be below the EMLs published in the required method, 1668A or 1668C.

**MS/MSD:**

The % relative difference between the MS and MSD spike recoveries should be less than or equal to 20%.

**Instrument/Run Performance Criteria:**

- 1 Elution windows must be defined by a 'Window Performance Mix' at the beginning of each 12-hour run sequence
- 2 GC performance criteria of 40% maximum valley between PCB-34/PCB-23, and PCB-187/PCB-182 (Octyl Column).
- 3 At the beginning of and just following the end of each 12 hour run sequence, the instrument must be checked to demonstrate a resolution of 10,000 within each quantification window (8,000 minimum across the window).
- 4 The relative retention times (RRT) of the compounds in the daily 209 congener mix must fall into the ranges presented in Table 4.
- 5 The RT in the daily CS3 verification standards must be within 15 seconds of the CS3 in the initial calibration run.
- 6 The maximum time between scans within a descriptor is 1 second.
- 7 Lock mass deviations to the average response must be less than or equal 20%.

**Laboratory Duplicates:**

The % relative difference between duplicates should be less than or equal to 25% but only where the response is greater than the low calibration standard.

**Analyte Identification Criteria:**

- 1 Ion ratio must be within 15% of theoretical or within 10% of the most recent CS3.
- 2 The retention time (RT) of the peak maxima for each pair of quantification ions must be no more than 2 seconds (i.e. 2 scans) difference.
- 3 The retention time (RT) of the peak maxima of all native analytes for which a labeled analogue is used must be within -1 to +3 seconds of the RT of corresponding  $^{13}\text{C}_{12}$ -labelled isomer of that injection run.
- 4 For those native analytes without a corresponding labelled isomer, the relative retention time (RRT) must be within 0.005 of the relative retention time observed in the daily 209 congener run.

## **DEVIATIONS AND CLARIFICATIONS FROM THE PRIMARY REFERENCES**

The reference methods applicable to this document are:  
US EPA Office of Water, Method 1668A  
US EPA Office of Water, Method 1668C

These methods are referred-to herein as Method 1668

The following changes and clarifications apply:

- 1) As stated in method 1668, alternate columns and column systems are allowable changes to the method. In the context of the method, it is clear that Table 2 of this method (including retention times, relative retention times, and quantitation references) is specific to the Octyl GC column if used exactly as suggested in the method.

As a performance based method, changes in the internal standard references could be considered an improvement even when using the SPB-Octyl column. However when using an alternate column system (which may or may not include use of the Octyl column), optimization of the quantitation references can be an important part of optimizing the method. Consider that the MS acquisition method must be divided into mass descriptors or 'functions', each one defining the masses that are monitored during that time range. When monitoring for all 209 PCB congeners, there are large chromatographic regions where elution of target compounds is nearly continuous with little separation between peaks. In addition, there is a slight acquisition "gap" that occurs at each function change (for Waters' instruments 1-2 seconds, for Thermo instruments 6-8 seconds), and also the likelihood of slight retention time shifts from one run to another. Consequently, choosing the exact location of each function boundary can be challenging. For a 1668 method, there are typically between 5 and 8 functions dependent upon the column, the GC conditions, the instrument and the choice of the function boundaries by the laboratory. Each function can have 1 to as many as 4 chlorination levels. When optimizing the quantification model in the case where RT and elution patterns have changed – even slightly - the best choice of internal standard references can and should change dependent upon target retention times and placement of function boundaries. For example, the best quantification is achieved using an internal standard reference that elutes at close to the same retention time. Another consideration is that it is best practice where possible (i.e. generally allows for more accurate target determinations) to have the internal standard reference within the same function rather than quantify a target relative to an internal standard from an outside function.

The quantification references used in this analysis are detailed in Table 3.

- 2) The absolute retention time criterion for decachlorobiphenyl of 55 minutes is not generally followed and is an unnecessary restriction since method 1668 was developed without the use of electronic pressure control on the GC injection system, and there are GC performance criteria that can be met without this restriction. As a result, the RRT criteria of 1668 may not be applicable.
- 3) Although not clearly stated in method 1668, we maintain that each and every individual clean-up procedure is, by definition, performance-based and optional. There is not an expectation within the industry to follow exactly the descriptions of clean-ups in reference methods. Adaptations which meet or exceed the required performance criteria are therefore acceptable within the scope of each reference method. The reference method descriptions are intended as guidelines or templates available to help the laboratory to define effective in-house clean-up methods. The objective within the laboratory is to provide quality clean extracts to the instrument for analysis. Each individual clean-up is part of the laboratory's available tools in order to achieve this objective.
- 4) There are differences within the individual reference methods as to the precise spiking protocols for adding extraction standards and native spikes (for LCS, MS and MSD). To ensure consistency within the laboratory between HRMS methods, the PCB preparative method requires solid samples (including stack and ambient sorbents/filters) to be spiked in the soxhlet extractor from a nonane solution and waters are spiked before filtering from an acetone solution.
- 5) Sub-sampling of solids and pre-extraction processing is done in a manner that minimizes potential for cross-contamination. These processes are designed around SW846 protocols rather than 1668 protocols. Solids are sub-sampled directly from the bottle as submitted to the laboratory wherever practical. If the sample is submitted such that homogenization in the bottle is impractical (eg. the bottle is too full or lumps cannot be broken down), then transferring the sample to a tray or another bottle maybe in order.
- 6) The concentration of labelled and native spiking solutions are not consistent with those listed in all of the reference methods. These concentrations are prepared at levels convenient and expedient for accurate laboratory processing.
- 7) Extraction and injection standard concentrations differ from 1668, in order to aid precise measurement and standardise volumes with other reference methods such as PCDD/F by 1613B.
- 8) Method 1668C recognizes the option to use the 209 congener mix as the daily calibration verification solution rather than the CS3. This document acknowledges and allows either calibration option for both 1668A and 1668C analytical approaches.
- 9) For method 1668C analysis, the OPR labelled recovery limits are the same as for the sample recovery limits in method 1668C. This represents a broader acceptance range for the OPR than is currently listed in method 1668C. However, the control of the native (i.e. non-labelled) recovery limits is the key item to demonstrate/monitor in the OPR. Furthermore, in the OPR performance, it is important to demonstrate these native controls are maintained within the same range of labelled recoveries as is observed in the sample data.

**Table 3: Quantitation References for Native and Labeled CBs**

Cl No. <sup>1</sup>	Congener No. <sup>2,3</sup>	RT Ref. <sup>4</sup>	Quantitation Reference <sup>5</sup>
Native Compounds			
1	1	1L	1L
1	2	3L	1L/3L
1	3	3L	3L
2	4	4L	4L
2	10	4L	4L/15L
2	9	4L	4L/15L
2	7	4L	4L/15L
2	6	4L	4L/15L
2	5	4L	4L/15L
2	8	4L	4L/15L
2	14	15L	4L/15L
2	11	15L	4L/15L
2	13/12	15L	4L/15L
2	15	15L	15L
3	19	19L	19L
3	30/18	19L	19L/37L
3	17	19L	19L/37L
3	27	19L	19L/37L
3	24	19L	19L/37L
3	16	19L	19L/37L
3	32	19L	19L/37L
3	34	19L	19L/37L
3	23	19L	19L/37L
3	26/29	19L	19L/37L
3	25	37L	19L/37L
3	31	37L	19L/37L
3	28/20	37L	19L/37L
3	21/33	37L	19L/37L
3	22	37L	19L/37L
3	36	37L	19L/37L
3	39	37L	19L/37L
3	38	37L	19L/37L
3	35	37L	19L/37L
3	37	37L	37L
4	54	54L	54L
4	50/53	54L	54L/81L/77L
4	45/51	54L	54L/81L/77L
4	46	54L	54L/81L/77L
4	52	54L	54L/81L/77L
4	73	54L	54L/81L/77L
4	43	54L	54L/81L/77L
4	69/49	54L	54L/81L/77L
4	48	54L	54L/81L/77L
4	44/47/65	54L	54L/81L/77L
4	59/62/75	54L	54L/81L/77L
4	42	54L	54L/81L/77L
4	41/40/71	54L	54L/81L/77L
4	64	54L	54L/81L/77L
4	72	81L	54L/81L/77L
4	68	81L	54L/81L/77L

Cl No. <sup>1</sup>	Congener No. <sup>2,3</sup>	RT Ref <sup>4</sup>	Quantitation Reference <sup>5</sup>
4	57	81L	54L/81L/77L
4	58	81L	54L/81L/77L
4	67	81L	54L/81L/77L
4	63	81L	54L/81L/77L
4	61/70/74/76	81L	54L/81L/77L
4	66	81L	54L/81L/77L
4	55	81L	54L/81L/77L
4	56	81L	54L/81L/77L
4	60	81L	54L/81L/77L
4	80	81L	54L/81L/77L
4	79	81L	54L/81L/77L
4	78	81L	54L/81L/77L
4	81	81L	81L
4	77	77L	77L
5	104	104L	104L
5	96	104L	104L/123L/114L/118L
5	103	104L	104L/123L/114L/118L
5	94	104L	104L/123L/114L/118L
5	95	104L	104L/123L/114L/118L
5	95/100/93/102/98	104L	104L/123L/114L/118L
5	88/91	104L	104L/123L/114L/118L
5	84	104L	104L/123L/114L/118L
5	89	104L	104L/123L/114L/118L
5	121	104L	104L/123L/114L/118L
5	92	123L	104L/123L/114L/118L
5	113/90/101	104L	104L/123L/114L/118L
5	83/99	104L	104L/123L/114L/118L
5	112	104L	104L/123L/114L/118L
5	108/119/86/97/125/87	104L	104L/123L/114L/118L
5	117/116/85/110/115	104L	104L/123L/114L/118L
5	82	104L	104L/123L/114L/118L
5	111	104L	104L/123L/114L/118L
5	120	104L	104L/123L/114L/118L
5	107/124	104L	104L/123L/114L/118L
5	109	104L	104L/123L/114L/118L
5	123	123L	123L
5	106	123L	104L/123L/114L/118L
5	118	118L	118L
5	122	118L	104L/123L/114L/118L
5	114	114L	114L
5	105	105L	105L
5	127	105L	104L/123L/114L/118L
5	126	126L	126L
6	155	155L	155L
6	152	155L	155L/156L/157L/167L
6	150	155L	155L/156L/157L/167L
6	136	155L	155L/156L/157L/167L
6	145	155L	155L/156L/157L/167L
6	148	155L	155L/156L/157L/167L
6	151/135	135L	155L/156L/157L/167L
6	154	155L	155L/156L/157L/167L
6	144	155L	155L/156L/157L/167L
6	147/149	155L	155L/156L/157L/167L
6	134/143	155L	155L/156L/157L/167L

Cl No. <sup>1</sup>	Congener No. <sup>2,3</sup>	RT Ref <sup>4</sup>	Quantitation
			Reference <sup>5</sup>
6	139/140	155L	155L/156L/157L/167L
6	131	155L	155L/156L/157L/167L
6	142	155L	155L/156L/157L/167L
6	132	155L	155L/156L/157L/167L
6	133	155L	155L/156L/157L/167L
6	165	167L	155L/156L/157L/167L
6	146	167L	155L/156L/157L/167L
6	161	167L	155L/156L/157L/167L
6	153/168	167L	155L/156L/157L/167L
6	141	167L	155L/156L/157L/167L
6	130	167L	155L/156L/157L/167L
6	137/164	167L	155L/156L/157L/167L
6	138/163/129	167L	155L/156L/157L/167L
6	160	167L	155L/156L/157L/167L
6	158	167L	155L/156L/157L/167L
6	128/166	167L	155L/156L/157L/167L
6	159	167L	155L/156L/157L/167L
6	162	167L	155L/156L/157L/167L
6	167	167L	155L/156L/157L/167L
6	156/157	156L/157L	156L/157L
6	169	169L	169L
7	188	188L	188L
7	179	188L	188L/189L
7	184	188L	188L/189L
7	176	188L	188L/189L
7	186	188L	188L/189L
7	178	188L	188L/189L
7	175	188L	188L/189L
7	187	188L	188L/189L
7	182	188L	188L/189L
7	183	188L	188L/189L
7	185	188L	188L/189L
7	174	188L	188L/189L
7	177	188L	188L/189L
7	181	188L	188L/189L
7	171/173	188L	188L/189L
7	172	189L	188L/189L
7	192	189L	188L/189L
7	180/193	189L	188L/189L
7	191	189L	188L/189L
7	170	189L	188L/189L
7	190	189L	188L/189L
7	189	189L	189L
8	202	202L	202L
8	201	202L	202L/205L
8	204	202L	202L/205L
8	197	202L	202L/205L
8	200	202L	202L/205L
8	198/199	202L	202L/205L
8	196	205L	202L/205L
8	203	205L	202L/205L
8	195	205L	202L/205L
8	194	205L	202L/205L
8	205	205L	205L
9	208	208L	208L
9	207	208L	208L/206L
9	206	206L	206L
10	209	209L	209L

Cl No. <sup>1</sup>	Congener No. <sup>2,3</sup>	RT Ref <sup>4</sup>	Quantitation Reference <sup>5</sup>
<b>Labelled Extraction Standards</b>			
1	1L	9L	9L
1	3L	9L	9L
2	4L	9L	9L
2	15L	9L	9L
3	19L	9L	9L
3	37L	52L	52L
4	54L	52L	52L
4	81L	101L	101L
4	77L	101L	101L
5	104L	101L	101L
5	123L	101L	101L
5	118L	101L	101L
5	114L	101L	101L
5	105L	101L	101L
5	126L	101L	101L
6	155L	101L	101L
6	167L	138L	138L
6	156L/157L	157L	138L
6	169L	138L	138L
7	188L	138L	138L
7	189L	138L	138L
8	202L	138L	138L
8	205L	194L	194L
9	208L	194L	194L
9	206L	194L	194L
10	209L	194L	194L
<b>Labelled clean-up standards</b>			
3	28L	52L	52L
5	111L	101L	101L
7	178L	138L	138L
<b>Labelled injection internal standards</b>			
2	9L	138L	138L
4	52L	138L	138L
5	101L	138L	138L
6	138L	138L	138L
8	194L	138L	138L

<sup>1</sup>. Number of chlorines on congener.

<sup>2</sup>. Suffix "L" indicates labelled compound.

<sup>3</sup>. Multiple congeners in a box indicates a group of congeners that co-elute or may not be adequately resolved on a 30-m SPBOctyl column. Congeners included in the group are listed as the last entry in the box.

<sup>4</sup>. Retention time reference that is used to locate target congener.

<sup>5</sup>. Labelled congeners that form the quantitation reference. Areas from the exact m/z's of the congeners listed in the quantitation

Table 5: HRMS Instrumental Descriptor Parameters

Function and chlorine level	m/z	m/z type	m/z formula	Substance
Fn-1; Cl-1	180.9888	QC	C4F7	PFK
	188.0393	M	12C12 H9 35Cl	Cl-1 CB
	190.0363	M+2	12C12 H9 37Cl	Cl-1 CB
	200.0795	M	13C12 H9 35Cl	13C12 Cl-1 CB
	202.0766	M+2	13C12 H9 37Cl	13C12 Cl-1 CB
	204.9983	QC	C6F7	PFK
	218.9856	lock	C4 F9	PFK
Fn-2; Cl-2,3	230.9850	QC	C5F9	PFK
	204.9883	QC	C6F7	PFK
	218.9856	QC	C4F9	PFK
	222.0003	M	12C12 H8 35Cl2	Cl-2 PCB
	223.9974	M+2	12C12 H8 35Cl 37Cl	Cl-2 PCB
	225.9944	M+4	12C12 H8 37Cl2	Cl-2 PCB
	234.0406	M	13C12 H8 35Cl2	13C12 Cl-2 PCB
	236.0376	M+2	13C12 H8 35Cl 37 Cl	13C12 Cl-2 PCB
	242.9856	lock	C6 F9	PFK
	255.9613	M	12C12 H7 35Cl3	Cl-3 PCB
	257.9584	M+2	12C12 H7 35Cl2 37Cl	Cl-3 PCB
	268.0016	M	13C12 H7 35Cl3	13C12 Cl-3 PCB
	269.9986	M+2	13C12 H7 35Cl2 37Cl 13C12	13C12 Cl-3 PCB
Fn-3 Cl-3,4,5	255.9613	M	12C12 H7 35Cl3	Cl-3 PCB
	257.9584	M+2	12C12 H7 35Cl2 37Cl	Cl-3 PCB
	268.0016	M	13C12 H7 35Cl3	13C12 Cl-3 PCB
	269.9986	M+2	13C12 H7 35Cl2 37Cl 13C12	13C12 Cl-3 PCB
	280.9825	lock	C6 F11	PFK
	289.9224	M	12C12 H6 35Cl4	Cl-4 PCB
	291.9194	M+2	12C12 H6 35Cl3 37Cl	Cl-4 PCB
	301.9626	M	13C12 H6 35Cl4	13C12 Cl-4 PCB
	303.9597	M+2	13C12 H6 35Cl3 37Cl	13C12 Cl-4 PCB
	323.8834	M	12C12 H5 35Cl5	Cl-5 PCB
	325.8804	M+2	12C12 H5 35Cl4 37Cl	Cl-5 PCB
	327.8775	M+4	12C12 H5 35Cl3 37Cl2	Cl-5 PCB
	337.9207	M+2	13C12 H5 35Cl4 37Cl	13C12 Cl-5 PCB
	339.9178	M+4	13C12 H5 35Cl3 37Cl2	13C12 Cl-5 PCB
Fn-4 Cl-4,5,6	280.9824		C6 F11	PFK
	289.9224	M	12C12 H6 35Cl4	Cl-4 PCB
	291.9194	M+2	12C12 H6 35Cl3 37Cl	Cl-4 PCB
	293.9165	M+4	12C12 H6 35Cl2 37Cl2	Cl-4 PCB
	301.9626	M+2	13C12 H6 35Cl3 37Cl	13C12 Cl-4 PCB
	303.9597	M+4	13C12 H6 35Cl2	13C12 Cl-4 PCB
	323.8834	M	12C12 H5 35Cl5	Cl-5 PCB
	325.8804	M+2	12C12 H5 35Cl4 37Cl	Cl-5 PCB
	327.8775	M+4	12C12 H5 35Cl3 37Cl2	Cl-5 PCB
	330.9792	lock	C7 F15	PFK
	337.9207	M+2	13C12 H5 35Cl4 37Cl 13C12	Cl-5 PCB
	339.9178	M+4	13C12 H5 35Cl3 37Cl2	13C12 Cl-5 PCB
	359.8415	M+2	13C12 H4 35Cl5 37Cl	Cl-6 PCB
	361.8385	M+4	13C12 H4 35Cl4 37Cl2	Cl-6 PCB
	363.8356	M+6	13C12 H4 35Cl3 37Cl2	Cl-6 PCB
	371.8817	M+2	13C12 H4 35Cl5 37Cl	13C12 Cl-6 PCB
	373.8788	M+4	13C12 H4 35Cl4 37Cl2	13C12 Cl-6 PCB

Function and chlorine level	m/z	m/z type	m/z formula	Substance
Fn-5	323.8834	M	12C12 H5 35Cl5	Cl-5 PCB
Cl-5,6,7	325.8804	M+2	12C12 H5 35Cl4 37Cl	Cl-5 PCB
	327.8775	M+4	12C12 H5 35Cl3 37Cl2	Cl-5 PCB
	337.9207	M+2	13C12 H5 35Cl4 37Cl	13C12 Cl-5 PCB
	339.9178	M+4	13C12 H5 35Cl3 37Cl2	13C12 Cl-5 PCB
	354.9792	lock	C9 F13	PFK
	359.8415	M+2	12C12 H4 35Cl5 37Cl	Cl-6 PCB
	361.8385	M+4	12C12 H4 35Cl4 37Cl2	Cl-6 PCB
	363.8356	M+6	12C12 H4 35Cl3 37Cl3	Cl-6 PCB
	371.8817	M+2	13C12 H4 35Cl5 37Cl	13C12 Cl-6 PCB
	373.8788	M+4	13C12 H4 35Cl4 37Cl2	13C12 Cl-6 PCB
	393.8025	M+2	12C12 H3 35Cl6 37Cl	Cl-7 PCB
	395.7995	M+4	12C12 H3 35Cl5 37Cl2	Cl-7 PCB
	397.7966	M+6	12C12 H3 35Cl4 37Cl3	Cl-7 PCB
	405.8428	M+2	13C12 H3 35Cl6 37Cl	13C12 Cl-7 PCB
	407.8398	M+4	13C12 H3 35Cl5 37Cl2	13C12 Cl-7 PCB
	427.7635	M+2	12C12 H2 35Cl7 37Cl	Cl-8 PCB
	429.7606	M+4	12C12 H2 35Cl6 37Cl2	Cl-8 PCB
	431.7576	M+6	12C12 H2 35Cl5 37Cl3	Cl-8 PCB
	439.8038	M+2	13C12 H2 35Cl7 37Cl	13C12 Cl-8 PCB
	441.8008	M+4	13C12 H2 35Cl6 37Cl2	13C12 Cl-8 PCB
Fn-6	393.8025	M+2	12C12 H3 35Cl6 37Cl	Cl-7 PCB
Cl-7,8,9,10	395.7995	M+4	12C12 H3 35Cl5 37Cl2	Cl-7 PCB
	397.7966	M+6	12C12 H3 35Cl4 37Cl3	Cl-7 PCB
	405.8428	M+2	13C12 H3 35Cl6 37Cl 13C12	Cl-7 PCB
	407.8398	M+4	13C12 H3 35Cl5 37Cl2	13C12 Cl-7 PCB
	427.7635	M+2	12C12 H2 35Cl7 37Cl	Cl-8 PCB
	429.7606	M+4	12C12 H2 35Cl6 37Cl2	Cl-8 PCB
	431.7576	M+6	12C12 H2 35Cl5 37Cl3	Cl-8 PCB
	439.8038	M+2	13C12 H2 35Cl7 37Cl	13C12 Cl-8 PCB
	441.8008	M+4	13C12 H2 35Cl6 37Cl2	13C12 Cl-8 PCB
	442.9728	QC	C10 F13	PFK
	454.9728	lock	C11 F13	PFK
	461.7246	M+2	12C12 H1 35Cl8 37Cl	Cl-9 PCB
	463.7216	M+4	12C12 H1 35Cl7 37Cl2	Cl-9 PCB
	465.7187	M+6	12C12 H1 35Cl6 37Cl3	Cl-9 PCB
	473.7648	M+2	13C12 H1 35Cl8 37Cl	13C12 Cl-9 PCB
	475.7619	M+4	13C12 H1 35Cl7 37Cl2	13C12 Cl-9 PCB
	495.6856	M+2	13C12 H4 35Cl9 37Cl	Cl-10 PCB
Fn-7	497.6826	M+4	12C12 35Cl8 37Cl2	Cl-10 PCB
	499.6797	M+6	12C12 35Cl7 37Cl3	Cl-10 PCB
	509.7229	M+4	13C12 H4 35Cl8 37Cl2	13C12 Cl-10 PCB
	511.7199	M+6	13C12 H4 35Cl8 37Cl4	13C12 Cl-10 PCB
	516.9697	lock	C13F19	PFK

**Data Calculations:****a) Analyte Concentrations:**

The relative response factor of each target relative to the standard against which it is to be calculated is determined using the area responses of both quantification ions via equation 9.1.

In cases where a native target is calculated against an exact labelled analogue, the quantification will be considered to be by isotope dilution. In other cases, the quantification will be considered to be by internal standard.

$$\text{RRF} = \frac{(A_{1t} + A_{2t}) C_s}{(A_{1s} + A_{2s}) C_t} \quad \text{Equ. 9.1}$$

Where,

$A_{1t} + A_{2t}$  = The areas of the two quantification ions for the target analyte

$A_{1s} + A_{2s}$  = The areas of the two quantification ions for the labelled compound against which the target analyte will be calculated.

$C_t$  = The concentration in the calibration standard of the target analyte.

$C_s$  = The concentration in the calibration standard of the labelled compound against which the target will be calculated.

For all analytes to be quantified and from the initial calibration series of standard injections, a table of RRFs is prepared. The relative standard deviation (%RSD, or the coefficient of variance) is checked to confirm that the appropriate method criteria has been met as listed in Table 3. The average of the five or six levels of standard for each analyte,  $\text{RRF}_{av}$  is applied for quantification of samples according to Equations 9.2 and 9.3 below.

$$\text{Amount in sample (pg)} = \frac{(A_{1n} + A_{2n}) Q_l}{(A_{1l} + A_{2l}) (\text{RRF}_{av})} \quad \text{Equ. 9.2}$$

$$\text{Concentration in sample (pg/g or pg/l)} = \frac{(A_{1n} + A_{2n}) Q_l}{(A_{1l} + A_{2l}) (\text{RRF}_{av}) (W_s)} \quad \text{Equ. 9.3}$$

Where,

$Q_l$  = The amount (pg) of labelled compound added to the sample

$W_s$  = The weight (g) or volume (l) of sample

**b) Extraction, Clean-up, and Sampling Standard Recovery Calculation:**

The extraction, clean-up, and sampling standard recoveries are determined by Equation 9.4 below.

$$\% \text{ Recovery} = (\text{Amount in sample}) / (\text{Amount added to sample}) \times 100 \quad \text{Equ. 9.4}$$

**c) Estimated Detection Limit**

$$\text{EDL} = \frac{2.5 \times H_x \times Q_{es}}{H_{es} \times W \times \text{RRF}_{av}} \quad \text{Equ. 9.5}$$

Where,

$EDL$  = estimated detection limit for homologous PCB

$H_x$  = sum of the height of the noise level for each quantification ions for the unlabelled PCB.

$H_{es}$  = Sum of the heights of responses of both quantification ions for the labelled extraction standard.

$W$  = weight of volume of sample

$\text{RRF}_{av}$  = average relative response factor

$Q_{es}$  = Amount of extraction standard added

## **Chromatogram Annotation Codes**

All manually integrated peaks are expanded and reprinted with the following annotations:

* Analyst Initials	AA
* Date	YYMMDD
* integration code	CC

The Syntax is:

AAYYMMDDCC

Example:

SK111220MB

<b>Code</b>	<b>Mnemonic</b>	<b>Description</b>
MB	Manual Baseline	The peak was manually integrated because the initial baseline was determined incorrectly by the software
MS	Manual Split	The peak was manually integrated because the peak was incorrectly or not split by the software
MJ/MC	Manual Join/Manual Combine	The peak was manually integrated because the peak was split by the software and the peak should be integrated as a single peak
MA	Manual Add	The peak was manually integrated because the signal:noise ratio was judged to be >2.5
MD	Manual Delete	The peak was excluded because the signal:noise ratio was judged to be <2.5
MX	Manual Exclude	The peak was excluded due to an interference
NH	Noise Height	The noise height for Estimated Detection Limit calculation was chosen by the analyst (automated noise height not appropriate)
MT	Manual Time	The peak retention time was manually chosen

The following explanatory annotation codes may appear on the chromatograms of peaks that have been reviewed:

<b>Code</b>	<b>Mnemonic</b>	<b>Description</b>
+	Detected Peak	A peak was detected at this mass and retention time that was above 2.5:1 signal to noise
<	Below Detection Limit	The signal at this mass and retention time was below 2.5:1 signal to noise
EMPC	Estimated Maximum Possible Concentration	The signal at this mass and retention time is an interference such that the target compound could not be confirmed
X-RT	Not Detected due to Retention Time non-conformance	The signal at this retention time could not be used to positively identify the target compound because of retention time non-conformance (apex of quantification and confirmation ions do not maximize within the same two seconds, or the retention time of the peak does not fall within the expected range with respect to its labeled analogue)
X-LOC	Not Detected due to interference from a higher level of chlorination	The signal at this retention time is attributable to a fragment from a co-eluting compound at a higher level of chlorination, and cannot be used to positively identify the target. The result is expressed as an Estimated Maximum Possible Concentration (EMPC)
X-DPE	Not Detected due to diphenyl ether interference	The signal at this retention time is attributable to interference from a chlorinated diphenyl ether, and cannot be used to positively identify the target. The result is expressed as an Estimated Maximum Possible Concentration (EMPC)
X-IF	Not Detected due to interference	The signal at this retention time is attributable to a co-eluting interference, and cannot be used to positively identify the target. The result is expressed as an Estimated Maximum Possible Concentration (EMPC)



1435 Norjohn Court, Unit 1, Burlington, ON, Canada L7L 0E6

## SVOC DATA PACKAGE

### SECTION 4: CALIBRATION DATA

Including:

- for Multi-Point Calibration(s)
  - Multi-Point Calibration Tables
  - Individual Quantitation Reports

- for Continuing Calibration(s)
  - Individual Quantitation Reports

# ALS Life sciences

## Calibration Summary Report

Calibration Level	Filename	Run Date						
CS-1	5-150917B01	17-Sep-2015 15:09						
CS-2	5-150917B06	17-Sep-2015 18:44						
CS-3	5-150917B05	17-Sep-2015 18:07						
CS-4	5-150917B04	17-Sep-2015 17:25						
CS-5	5-150917B03	17-Sep-2015 16:46						
			Approved:	E. Sabljic --e-signature-- 11-Dec-2015				
<b>Relative Response Factors</b>								
Target Analytes	CS-1	CS-2	CS-3	CS-4	CS-5	Mean	% RSD	
PCB-001	0.724	0.872	0.940	0.967	0.821	0.865	11%	
PCB-003	0.754	0.942	1.007	1.028	0.920	0.930	12%	
PCB-004	0.799	0.925	1.046	1.068	1.078	0.983	12%	
PCB-015	0.740	0.950	1.004	1.030	1.045	0.954	13%	
PCB-019	0.788	0.930	1.081	1.133	1.138	1.014	15%	
PCB-037	0.697	0.921	0.998	1.036	1.049	0.940	15%	
PCB-054	0.773	0.921	1.058	1.102	1.117	0.994	15%	
PCB-081	0.773	0.988	1.097	1.127	1.149	1.027	15%	
PCB-077	0.890	1.002	1.048	1.072	1.092	1.021	8%	
PCB-104	0.891	1.048	1.207	1.258	1.280	1.137	14%	
PCB-123	0.682	0.866	1.002	1.034	1.051	0.927	17%	
PCB-118	0.694	0.923	1.057	1.084	1.103	0.972	18%	
PCB-114	0.755	0.951	1.079	1.122	1.140	1.009	16%	
PCB-105	0.740	0.924	1.055	1.080	1.117	0.983	16%	
PCB-126	0.739	0.941	1.081	1.115	1.130	1.001	16%	
PCB-155	0.792	0.933	1.084	1.136	1.156	1.020	15%	
PCB-167	0.908	1.083	1.250	1.303	1.314	1.172	15%	
PCB-156/157	0.879	1.070	1.202	1.234	1.253	1.128	14%	
PCB-169	0.784	1.001	1.163	1.186	1.204	1.068	17%	
PCB-188	0.745	0.852	1.027	1.077	1.097	0.960	16%	
PCB-189	0.647	0.806	0.934	0.961	0.990	0.868	16%	
PCB-202	0.789	0.887	1.078	1.126	1.153	1.007	16%	
PCB-205	0.614	0.729	0.889	0.929	0.945	0.821	18%	
PCB-208	0.718	0.833	0.992	1.048	1.065	0.931	16%	
PCB-206	0.631	0.732	0.941	0.995	1.010	0.862	20%	
PCB-209	0.639	0.696	0.878	0.919	0.927	0.812	17%	
<b>Extraction Standards</b>								
13C12-PCB-001	1.140	1.306	1.268	1.240	1.217	1.234	5%	
13C12-PCB-003	1.025	1.163	1.133	1.132	1.135	1.118	5%	
13C12-PCB-004	0.636	0.639	0.646	0.671	0.672	0.653	3%	
13C12-PCB-015	0.923	1.031	0.999	1.008	1.044	1.001	5%	
13C12-PCB-019	0.458	0.411	0.426	0.466	0.486	0.449	7%	
13C12-PCB-037	1.671	1.913	1.840	1.816	1.846	1.817	5%	
13C12-PCB-054	1.257	1.127	1.182	1.285	1.340	1.238	7%	
13C12-PCB-081	1.492	1.680	1.638	1.662	1.686	1.632	5%	
13C12-PCB-077	1.647	1.887	1.803	1.820	1.793	1.790	5%	
13C12-PCB-104	1.264	1.176	1.196	1.255	1.268	1.232	3%	
13C12-PCB-123	1.312	1.426	1.393	1.416	1.432	1.396	4%	
13C12-PCB-118	1.384	1.518	1.473	1.496	1.494	1.473	4%	
13C12-PCB-114	1.289	1.429	1.392	1.402	1.409	1.384	4%	
13C12-PCB-105	1.314	1.466	1.416	1.439	1.424	1.412	4%	
13C12-PCB-126	1.299	1.529	1.457	1.454	1.429	1.434	6%	
13C12-PCB-155	1.394	1.346	1.341	1.372	1.348	1.360	2%	
13C12-PCB-167	1.172	1.207	1.191	1.241	1.244	1.211	3%	
13C12-PCB-156/157	1.188	1.224	1.214	1.279	1.286	1.238	3%	
13C12-PCB-169	1.203	1.243	1.238	1.309	1.317	1.262	4%	
13C12-PCB-188	1.333	1.245	1.261	1.334	1.335	1.302	3%	
13C12-PCB-189	1.202	1.355	1.354	1.359	1.321	1.318	5%	
13C12-PCB-202	0.975	0.891	0.895	0.961	0.964	0.937	4%	
13C12-PCB-205	1.375	1.392	1.383	1.398	1.439	1.397	2%	
13C12-PCB-208	1.142	1.071	1.078	1.089	1.139	1.104	3%	
13C12-PCB-206	0.812	0.768	0.771	0.797	0.834	0.796	4%	
13C12-PCB-209	1.022	1.051	1.030	1.030	1.058	1.038	1%	
<b>Field Spike Standards</b>								
13C12-PCB-031	1.259	1.297	1.292	1.222	1.149	1.244	5%	
13C12-PCB-095	0.714	0.691	0.694	0.670	0.662	0.686	3%	
13C12-PCB-153	0.895	0.880	0.875	0.867	0.850	0.873	2%	
<b>Cleanup Standards</b>								
13C12-PCB-028	1.701	1.866	1.826	1.763	1.715	1.774	4%	
13C12-PCB-111	1.282	1.352	1.312	1.321	1.314	1.316	2%	
13C12-PCB-178	0.867	0.819	0.826	0.852	0.848	0.842	2%	

# ALS Life sciences

## Calibration Report

ALS Sample ID **H5-15-CS1-011**

Analysis Method **EPA 1668A**

Analysis Type **Calibration**

Filename	Inst #	Column	Run Date	Approved:
5-150917B01	HRMS-5	SPBOCTYL56284-02B	17-Sep-2015 15:09	<i>E. Sabljić</i> --e-signature-- 11-Dec-2015

Target Analytes	Ret. Time	Ion Ratio	Concentration ng/mL	Response	RRF
PCB-001	8.86	3.50	1.00	2.04E+04	0.724
PCB-003	10.4	3.59	1.00	1.91E+04	0.754
PCB-004	10.58	1.37	1.00	1.25E+04	0.799
PCB-015	14.26	1.49	1.00	1.68E+04	0.740
PCB-019	12.58	1.09	1.00	8.89E+03	0.788
PCB-037	18.21	1.06	1.00	1.40E+04	0.697
PCB-054	14.45	0.74	1.00	1.17E+04	0.773
PCB-081	21.8	0.71	1.00	1.28E+04	0.773
PCB-077	22.09	0.66	1.00	1.63E+04	0.890
PCB-104	17.54	1.71	1.00	1.25E+04	0.891
PCB-123	23.1	1.48	1.00	9.94E+03	0.682
PCB-118	23.28	1.68	1.00	1.07E+04	0.694
PCB-114	23.58	1.54	1.00	1.08E+04	0.755
PCB-105	23.91	1.57	1.00	1.08E+04	0.740
PCB-126	25.49	1.54	1.00	1.07E+04	0.739
PCB-155	20.56	1.35	1.00	1.22E+04	0.792
PCB-167	26.41	1.22	1.00	1.18E+04	0.908
PCB-156/157	27.03	1.24	2.00	2.31E+04	0.879
PCB-169	28.67	1.25	1.00	1.04E+04	0.784
PCB-188	23.54	1.07	1.00	1.10E+04	0.745
PCB-189	29.95	1.06	1.00	8.60E+03	0.647
PCB-202	26.3	0.90	1.00	8.50E+03	0.789
PCB-205	31.35	0.92	1.00	7.28E+03	0.614
PCB-208	29.71	0.72	1.00	7.07E+03	0.718
PCB-206	32.43	0.73	1.00	4.42E+03	0.631
PCB-209	33.57	1.15	1.00	5.64E+03	0.639

### Extraction Standards

13C12-PCB-001	8.85	3.11	100.00	2.81E+06	1.140
13C12-PCB-003	10.39	3.07	100.00	2.53E+06	1.025
13C12-PCB-004	10.56	1.60	100.00	1.57E+06	0.636
13C12-PCB-015	14.25	1.60	100.00	2.28E+06	0.923
13C12-PCB-019	12.57	1.07	100.00	1.13E+06	0.458
13C12-PCB-037	18.2	1.05	100.00	2.01E+06	1.671
13C12-PCB-054	14.44	0.81	100.00	1.51E+06	1.257
13C12-PCB-081	21.78	0.79	100.00	1.66E+06	1.492
13C12-PCB-077	22.08	0.79	100.00	1.83E+06	1.647
13C12-PCB-104	17.52	1.61	100.00	1.40E+06	1.264
13C12-PCB-123	23.09	1.59	100.00	1.46E+06	1.312
13C12-PCB-118	23.26	1.58	100.00	1.54E+06	1.384
13C12-PCB-114	23.57	1.60	100.00	1.43E+06	1.289
13C12-PCB-105	23.9	1.59	100.00	1.46E+06	1.314
13C12-PCB-126	25.48	1.62	100.00	1.44E+06	1.299
13C12-PCB-155	20.54	1.28	100.00	1.55E+06	1.394
13C12-PCB-167	26.4	1.28	100.00	1.30E+06	1.172
13C12-PCB-156/157	27.02	1.30	200.00	2.63E+06	1.188
13C12-PCB-169	28.66	1.28	100.00	1.33E+06	1.203
13C12-PCB-188	23.53	1.06	100.00	1.47E+06	1.333
13C12-PCB-189	29.94	1.05	100.00	1.33E+06	1.202
13C12-PCB-202	26.29	0.92	100.00	1.08E+06	0.975
13C12-PCB-205	31.33	0.90	100.00	1.19E+06	1.375
13C12-PCB-208	29.7	0.78	100.00	9.85E+05	1.142
13C12-PCB-206	32.41	0.79	100.00	7.00E+05	0.812
13C12-PCB-209	33.56	1.18	100.00	8.81E+05	1.022

### Field Spike Standards

13C12-PCB-031	15.81	1.05	100.00	1.98E+06	1.259
13C12-PCB-095	19.12	1.56	100.00	1.04E+06	0.714
13C12-PCB-153	24.21	1.29	100.00	1.23E+06	0.895

### Cleanup Standards

13C12-PCB-028	15.98	1.05	100.00	2.05E+06	1.701
13C12-PCB-111	22.04	1.60	100.00	1.42E+06	1.282
13C12-PCB-178	25.08	1.06	100.00	9.58E+05	0.867

### Injection Standards

13C12-PCB-9	11.84	1.61	100.00	2.47E+06	-
13C12-PCB-52	16.98	0.79	100.00	1.20E+06	-
13C12-PCB-101	20.66	1.58	100.00	1.11E+06	-
13C12-PCB-138	24.87	1.31	100.00	1.11E+06	-
13C12-PCB-194	31.05	0.89	100.00	8.62E+05	-

# ALS Life sciences

## Calibration Report

ALS Sample ID **H5-15-CS2-011**

Analysis Method **EPA 1668A**

Analysis Type **Calibration**

Filename 5-150917B06	Inst # HRMS-5	Column SPBOCTYL56284-02B	Run Date 17-Sep-2015 18:44	Approved: <i>E. Sabljic</i> --e-signature-- 11-Dec-2015
-------------------------	------------------	-----------------------------	-------------------------------	------------------------------------------------------------------

Target Analytes	Ret. Time	Ion Ratio	Concentration ng/mL	Response	RRF
PCB-001	8.88	3.28	5.00	1.33E+05	0.872
PCB-003	10.41	3.22	5.00	1.28E+05	0.942
PCB-004	10.59	1.54	5.00	6.89E+04	0.925
PCB-015	14.28	1.55	5.00	1.14E+05	0.950
PCB-019	12.59	1.08	5.00	4.46E+04	0.930
PCB-037	18.23	1.01	5.00	1.03E+05	0.921
PCB-054	14.47	0.81	5.00	6.07E+04	0.921
PCB-081	21.81	0.73	5.00	9.24E+04	0.988
PCB-077	22.11	0.72	5.00	1.05E+05	1.002
PCB-104	17.56	1.67	5.00	6.85E+04	1.048
PCB-123	23.13	1.63	5.00	6.87E+04	0.866
PCB-118	23.3	1.61	5.00	7.79E+04	0.923
PCB-114	23.59	1.66	5.00	7.56E+04	0.951
PCB-105	23.94	1.68	5.00	7.54E+04	0.924
PCB-126	25.51	1.63	5.00	8.00E+04	0.941
PCB-155	20.58	1.31	5.00	6.99E+04	0.933
PCB-167	26.44	1.27	5.00	7.63E+04	1.083
PCB-156/157	27.05	1.27	10.00	1.53E+05	1.070
PCB-169	28.69	1.28	5.00	7.26E+04	1.001
PCB-188	23.57	1.07	5.00	6.19E+04	0.852
PCB-189	29.98	1.01	5.00	6.37E+04	0.806
PCB-202	26.32	0.91	5.00	4.61E+04	0.887
PCB-205	31.37	0.89	5.00	4.92E+04	0.729
PCB-208	29.73	0.76	5.00	4.32E+04	0.833
PCB-206	32.46	0.77	5.00	2.72E+04	0.732
PCB-209	33.61	1.16	5.00	3.54E+04	0.696

### Extraction Standards

13C12-PCB-001	8.86	3.14	100.00	3.04E+06	1.306
13C12-PCB-003	10.4	3.08	100.00	2.71E+06	1.163
13C12-PCB-004	10.58	1.62	100.00	1.49E+06	0.639
13C12-PCB-015	14.27	1.57	100.00	2.40E+06	1.031
13C12-PCB-019	12.59	1.10	100.00	9.59E+05	0.411
13C12-PCB-037	18.22	1.06	100.00	2.24E+06	1.913
13C12-PCB-054	14.46	0.81	100.00	1.32E+06	1.127
13C12-PCB-081	21.81	0.80	100.00	1.87E+06	1.680
13C12-PCB-077	22.1	0.78	100.00	2.10E+06	1.887
13C12-PCB-104	17.54	1.61	100.00	1.31E+06	1.176
13C12-PCB-123	23.11	1.58	100.00	1.59E+06	1.426
13C12-PCB-118	23.29	1.60	100.00	1.69E+06	1.518
13C12-PCB-114	23.58	1.59	100.00	1.59E+06	1.429
13C12-PCB-105	23.92	1.60	100.00	1.63E+06	1.466
13C12-PCB-126	25.5	1.60	100.00	1.70E+06	1.529
13C12-PCB-155	20.56	1.28	100.00	1.50E+06	1.346
13C12-PCB-167	26.43	1.29	100.00	1.41E+06	1.207
13C12-PCB-156/157	27.04	1.29	200.00	2.86E+06	1.224
13C12-PCB-169	28.68	1.28	100.00	1.45E+06	1.243
13C12-PCB-188	23.55	1.07	100.00	1.45E+06	1.245
13C12-PCB-189	29.96	1.06	100.00	1.58E+06	1.355
13C12-PCB-202	26.31	0.92	100.00	1.04E+06	0.891
13C12-PCB-205	31.36	0.91	100.00	1.35E+06	1.392
13C12-PCB-208	29.72	0.78	100.00	1.04E+06	1.071
13C12-PCB-206	32.44	0.79	100.00	7.44E+05	0.768
13C12-PCB-209	33.58	1.19	100.00	1.02E+06	1.051

### Field Spike Standards

13C12-PCB-031	15.83	1.06	100.00	2.07E+06	1.297
13C12-PCB-095	19.14	1.57	100.00	1.07E+06	0.691
13C12-PCB-153	24.24	1.30	100.00	1.27E+06	0.880

### Cleanup Standards

13C12-PCB-028	16	1.05	100.00	2.18E+06	1.866
13C12-PCB-111	22.07	1.58	100.00	1.50E+06	1.352
13C12-PCB-178	25.11	1.09	100.00	9.56E+05	0.819

### Injection Standards

13C12-PCB-9	11.86	1.62	100.00	2.33E+06	-
13C12-PCB-52	17	0.79	100.00	1.17E+06	-
13C12-PCB-101	20.68	1.59	100.00	1.11E+06	-
13C12-PCB-138	24.9	1.29	100.00	1.17E+06	-
13C12-PCB-194	31.08	0.90	100.00	9.68E+05	-

# ALS Life sciences

## Calibration Report

ALS Sample ID **H5-15-CS3-011**

Analysis Method **EPA 1668A**

Analysis Type **Calibration**

Filename 5-150917B05	Inst # HRMS-5	Column SPBOCTYL56284-02B	Run Date 17-Sep-2015 18:07	Approved: <i>E. Sabljić</i> --e-signature-- 11-Dec-2015
-------------------------	------------------	-----------------------------	-------------------------------	------------------------------------------------------------------

Target Analytes	Ret. Time	Ion Ratio	Concentration ng/mL	Response	RRF
PCB-001	8.85	3.11	50.00	1.95E+06	0.940
PCB-003	10.39	3.11	50.00	1.87E+06	1.007
PCB-004	10.56	1.55	50.00	1.11E+06	1.046
PCB-015	14.25	1.54	50.00	1.64E+06	1.004
PCB-019	12.58	1.08	50.00	7.54E+05	1.081
PCB-037	18.21	1.02	50.00	1.48E+06	0.998
PCB-054	14.44	0.80	50.00	1.01E+06	1.058
PCB-081	21.79	0.78	50.00	1.38E+06	1.097
PCB-077	22.09	0.76	50.00	1.45E+06	1.048
PCB-104	17.53	1.58	50.00	1.11E+06	1.207
PCB-123	23.1	1.56	50.00	1.07E+06	1.002
PCB-118	23.28	1.58	50.00	1.19E+06	1.057
PCB-114	23.57	1.58	50.00	1.15E+06	1.079
PCB-105	23.91	1.57	50.00	1.14E+06	1.055
PCB-126	25.49	1.58	50.00	1.21E+06	1.081
PCB-155	20.55	1.27	50.00	1.11E+06	1.084
PCB-167	26.41	1.26	50.00	1.17E+06	1.250
PCB-156/157	27.03	1.26	100.00	2.29E+06	1.202
PCB-169	28.67	1.27	50.00	1.13E+06	1.163
PCB-188	23.54	1.05	50.00	1.02E+06	1.027
PCB-189	29.95	1.03	50.00	9.92E+05	0.934
PCB-202	26.3	0.91	50.00	7.57E+05	1.078
PCB-205	31.35	0.91	50.00	8.10E+05	0.889
PCB-208	29.71	0.79	50.00	7.05E+05	0.992
PCB-206	32.43	0.79	50.00	4.78E+05	0.941
PCB-209	33.58	1.19	50.00	5.97E+05	0.878

### Extraction Standards

13C12-PCB-001	8.84	3.13	100.00	4.15E+06	1.268
13C12-PCB-003	10.39	3.09	100.00	3.71E+06	1.133
13C12-PCB-004	10.55	1.61	100.00	2.12E+06	0.646
13C12-PCB-015	14.24	1.57	100.00	3.27E+06	0.999
13C12-PCB-019	12.57	1.09	100.00	1.40E+06	0.426
13C12-PCB-037	18.2	1.06	100.00	2.97E+06	1.840
13C12-PCB-054	14.43	0.81	100.00	1.91E+06	1.182
13C12-PCB-081	21.78	0.80	100.00	2.51E+06	1.638
13C12-PCB-077	22.08	0.79	100.00	2.76E+06	1.803
13C12-PCB-104	17.52	1.60	100.00	1.83E+06	1.196
13C12-PCB-123	23.09	1.58	100.00	2.13E+06	1.393
13C12-PCB-118	23.26	1.59	100.00	2.26E+06	1.473
13C12-PCB-114	23.55	1.59	100.00	2.13E+06	1.392
13C12-PCB-105	23.89	1.57	100.00	2.17E+06	1.416
13C12-PCB-126	25.48	1.59	100.00	2.23E+06	1.457
13C12-PCB-155	20.54	1.28	100.00	2.06E+06	1.341
13C12-PCB-167	26.4	1.30	100.00	1.87E+06	1.191
13C12-PCB-156/157	27.02	1.29	200.00	3.81E+06	1.214
13C12-PCB-169	28.66	1.29	100.00	1.94E+06	1.238
13C12-PCB-188	23.53	1.08	100.00	1.98E+06	1.261
13C12-PCB-189	29.94	1.06	100.00	2.12E+06	1.354
13C12-PCB-202	26.29	0.92	100.00	1.40E+06	0.895
13C12-PCB-205	31.33	0.91	100.00	1.82E+06	1.383
13C12-PCB-208	29.7	0.78	100.00	1.42E+06	1.078
13C12-PCB-206	32.42	0.79	100.00	1.02E+06	0.771
13C12-PCB-209	33.56	1.19	100.00	1.36E+06	1.030

### Field Spike Standards

13C12-PCB-031	15.8	1.06	100.00	2.82E+06	1.292
13C12-PCB-095	19.11	1.58	100.00	1.45E+06	0.694
13C12-PCB-153	24.21	1.29	100.00	1.70E+06	0.875

### Cleanup Standards

13C12-PCB-028	15.98	1.05	100.00	2.95E+06	1.826
13C12-PCB-111	22.04	1.58	100.00	2.01E+06	1.312
13C12-PCB-178	25.08	1.08	100.00	1.30E+06	0.826

### Injection Standards

13C12-PCB-9	11.83	1.61	100.00	3.28E+06	-
13C12-PCB-52	16.97	0.79	100.00	1.61E+06	-
13C12-PCB-101	20.65	1.58	100.00	1.53E+06	-
13C12-PCB-138	24.87	1.30	100.00	1.57E+06	-
13C12-PCB-194	31.06	0.90	100.00	1.32E+06	-

# ALS Life sciences

## Calibration Report

ALS Sample ID **H5-15-CS4-011**

Analysis Method **EPA 1668A**

Analysis Type **Calibration**

Filename	Inst #	Column	Run Date	Approved:
5-150917B04	HRMS-5	SPBOCTYL56284-02B	17-Sep-2015 17:25	<i>E. Sabljić</i> --e-signature-- 11-Dec-2015

Target Analytes	Ret. Time	Ion Ratio	Concentration ng/mL	Response	RRF
<b>PCB-001</b>	8.83	3.10	400.00	1.24E+07	0.967
<b>PCB-003</b>	10.37	3.13	400.00	1.20E+07	1.028
<b>PCB-004</b>	10.54	1.54	400.00	7.41E+06	1.068
<b>PCB-015</b>	14.22	1.53	400.00	1.07E+07	1.030
<b>PCB-019</b>	12.55	1.07	400.00	5.47E+06	1.133
<b>PCB-037</b>	18.17	1.02	400.00	9.57E+06	1.036
<b>PCB-054</b>	14.41	0.80	400.00	7.20E+06	1.102
<b>PCB-081</b>	21.75	0.78	400.00	8.96E+06	1.127
<b>PCB-077</b>	22.04	0.78	400.00	9.33E+06	1.072
<b>PCB-104</b>	17.49	1.58	400.00	7.55E+06	1.258
<b>PCB-123</b>	23.07	1.56	400.00	7.00E+06	1.034
<b>PCB-118</b>	23.24	1.56	400.00	7.76E+06	1.084
<b>PCB-114</b>	23.53	1.57	400.00	7.53E+06	1.122
<b>PCB-105</b>	23.87	1.56	400.00	7.43E+06	1.080
<b>PCB-126</b>	25.45	1.58	400.00	7.76E+06	1.115
<b>PCB-155</b>	20.52	1.27	400.00	7.45E+06	1.136
<b>PCB-167</b>	26.37	1.26	400.00	7.62E+06	1.303
<b>PCB-156/157</b>	26.99	1.25	800.00	1.49E+07	1.234
<b>PCB-169</b>	28.63	1.27	400.00	7.31E+06	1.186
<b>PCB-188</b>	23.51	1.04	400.00	6.77E+06	1.077
<b>PCB-189</b>	29.91	1.02	400.00	6.15E+06	0.961
<b>PCB-202</b>	26.25	0.91	400.00	5.10E+06	1.126
<b>PCB-205</b>	31.3	0.90	400.00	5.22E+06	0.929
<b>PCB-208</b>	29.67	0.79	400.00	4.58E+06	1.048
<b>PCB-206</b>	32.38	0.79	400.00	3.18E+06	0.995
<b>PCB-209</b>	33.53	1.18	400.00	3.80E+06	0.919

### Extraction Standards

<b>13C12-PCB-001</b>	8.81	3.10	100.00	3.21E+06	1.240
<b>13C12-PCB-003</b>	10.35	3.07	100.00	2.93E+06	1.132
<b>13C12-PCB-004</b>	10.53	1.63	100.00	1.74E+06	0.671
<b>13C12-PCB-015</b>	14.21	1.56	100.00	2.61E+06	1.008
<b>13C12-PCB-019</b>	12.53	1.08	100.00	1.21E+06	0.466
<b>13C12-PCB-037</b>	18.16	1.05	100.00	2.31E+06	1.816
<b>13C12-PCB-054</b>	14.4	0.81	100.00	1.63E+06	1.285
<b>13C12-PCB-081</b>	21.74	0.78	100.00	1.99E+06	1.662
<b>13C12-PCB-077</b>	22.04	0.79	100.00	2.18E+06	1.820
<b>13C12-PCB-104</b>	17.48	1.60	100.00	1.50E+06	1.255
<b>13C12-PCB-123</b>	23.06	1.58	100.00	1.69E+06	1.416
<b>13C12-PCB-118</b>	23.23	1.58	100.00	1.79E+06	1.496
<b>13C12-PCB-114</b>	23.52	1.59	100.00	1.68E+06	1.402
<b>13C12-PCB-105</b>	23.85	1.59	100.00	1.72E+06	1.439
<b>13C12-PCB-126</b>	25.44	1.58	100.00	1.74E+06	1.454
<b>13C12-PCB-155</b>	20.51	1.29	100.00	1.64E+06	1.372
<b>13C12-PCB-167</b>	26.36	1.28	100.00	1.46E+06	1.241
<b>13C12-PCB-156/157</b>	26.98	1.28	200.00	3.01E+06	1.279
<b>13C12-PCB-169</b>	28.61	1.28	100.00	1.54E+06	1.309
<b>13C12-PCB-188</b>	23.48	1.06	100.00	1.57E+06	1.334
<b>13C12-PCB-189</b>	29.9	1.06	100.00	1.60E+06	1.359
<b>13C12-PCB-202</b>	26.24	0.93	100.00	1.13E+06	0.961
<b>13C12-PCB-205</b>	31.29	0.90	100.00	1.40E+06	1.398
<b>13C12-PCB-208</b>	29.66	0.79	100.00	1.09E+06	1.089
<b>13C12-PCB-206</b>	32.37	0.78	100.00	8.00E+05	0.797
<b>13C12-PCB-209</b>	33.5	1.20	100.00	1.03E+06	1.030

### Field Spike Standards

<b>13C12-PCB-031</b>	15.76	1.06	100.00	2.15E+06	1.222
<b>13C12-PCB-095</b>	19.08	1.57	100.00	1.12E+06	0.670
<b>13C12-PCB-153</b>	24.17	1.28	100.00	1.33E+06	0.867

### Cleanup Standards

<b>13C12-PCB-028</b>	15.94	1.05	100.00	2.24E+06	1.763
<b>13C12-PCB-111</b>	22.01	1.58	100.00	1.58E+06	1.321
<b>13C12-PCB-178</b>	25.05	1.06	100.00	1.00E+06	0.852

### Injection Standards

<b>13C12-PCB-9</b>	11.81	1.60	100.00	2.59E+06	-
<b>13C12-PCB-52</b>	16.93	0.79	100.00	1.27E+06	-
<b>13C12-PCB-101</b>	20.61	1.59	100.00	1.20E+06	-
<b>13C12-PCB-138</b>	24.84	1.29	100.00	1.18E+06	-
<b>13C12-PCB-194</b>	31.01	0.90	100.00	1.00E+06	-

# ALS Life sciences

## Calibration Report

ALS Sample ID **H5-15-CS5-011**

Analysis Method **EPA 1668A**

Analysis Type **Calibration**

Filename	Inst #	Column	Run Date	Approved:
5-150917B03	HRMS-5	SPBOCTYL56284-02B	17-Sep-2015 16:46	<i>E. Sabljić</i> --e-signature-- 11-Dec-2015

Target Analytes	Ret. Time	Ion Ratio	Concentration ng/mL	Response	RRF
PCB-001	8.84	2.45	2000.00	5.76E+07	0.821
PCB-003	10.38	2.64	2000.00	6.02E+07	0.920
PCB-004	10.55	1.55	2000.00	4.18E+07	1.078
PCB-015	14.24	1.55	2000.00	6.29E+07	1.045
PCB-019	12.57	1.07	2000.00	3.19E+07	1.138
PCB-037	18.19	1.03	2000.00	5.40E+07	1.049
PCB-054	14.43	0.80	2000.00	4.17E+07	1.117
PCB-081	21.77	0.78	2000.00	5.05E+07	1.149
PCB-077	22.07	0.78	2000.00	5.10E+07	1.092
PCB-104	17.51	1.59	2000.00	4.23E+07	1.280
PCB-123	23.09	1.56	2000.00	3.92E+07	1.051
PCB-118	23.25	1.56	2000.00	4.29E+07	1.103
PCB-114	23.55	1.57	2000.00	4.19E+07	1.140
PCB-105	23.89	1.57	2000.00	4.15E+07	1.117
PCB-126	25.46	1.57	2000.00	4.21E+07	1.130
PCB-155	20.53	1.28	2000.00	4.06E+07	1.156
PCB-167	26.39	1.27	2000.00	4.16E+07	1.314
PCB-156/157	27	1.27	4000.00	8.19E+07	1.253
PCB-169	28.65	1.27	2000.00	4.03E+07	1.204
PCB-188	23.52	1.04	2000.00	3.72E+07	1.097
PCB-189	29.93	1.03	2000.00	3.33E+07	0.990
PCB-202	26.27	0.91	2000.00	2.82E+07	1.153
PCB-205	31.33	0.90	2000.00	2.80E+07	0.945
PCB-208	29.68	0.79	2000.00	2.50E+07	1.065
PCB-206	32.41	0.79	2000.00	1.73E+07	1.010
PCB-209	33.54	1.18	2000.00	2.02E+07	0.927

### Extraction Standards

13C12-PCB-001	8.83	3.12	100.00	3.51E+06	1.217
13C12-PCB-003	10.37	3.06	100.00	3.27E+06	1.135
13C12-PCB-004	10.54	1.62	100.00	1.94E+06	0.672
13C12-PCB-015	14.22	1.58	100.00	3.01E+06	1.044
13C12-PCB-019	12.55	1.09	100.00	1.40E+06	0.486
13C12-PCB-037	18.18	1.05	100.00	2.57E+06	1.846
13C12-PCB-054	14.42	0.81	100.00	1.87E+06	1.340
13C12-PCB-081	21.76	0.78	100.00	2.20E+06	1.686
13C12-PCB-077	22.05	0.79	100.00	2.34E+06	1.793
13C12-PCB-104	17.5	1.60	100.00	1.65E+06	1.268
13C12-PCB-123	23.08	1.59	100.00	1.87E+06	1.432
13C12-PCB-118	23.24	1.59	100.00	1.95E+06	1.494
13C12-PCB-114	23.54	1.59	100.00	1.84E+06	1.409
13C12-PCB-105	23.88	1.58	100.00	1.86E+06	1.424
13C12-PCB-126	25.45	1.59	100.00	1.86E+06	1.429
13C12-PCB-155	20.53	1.27	100.00	1.76E+06	1.348
13C12-PCB-167	26.38	1.27	100.00	1.58E+06	1.244
13C12-PCB-156/157	26.99	1.29	200.00	3.27E+06	1.286
13C12-PCB-169	28.64	1.29	100.00	1.67E+06	1.317
13C12-PCB-188	23.51	1.07	100.00	1.70E+06	1.335
13C12-PCB-189	29.91	1.06	100.00	1.68E+06	1.321
13C12-PCB-202	26.26	0.91	100.00	1.23E+06	0.964
13C12-PCB-205	31.31	0.90	100.00	1.48E+06	1.439
13C12-PCB-208	29.67	0.78	100.00	1.17E+06	1.139
13C12-PCB-206	32.38	0.78	100.00	8.59E+05	0.834
13C12-PCB-209	33.53	1.19	100.00	1.09E+06	1.058

### Field Spike Standards

13C12-PCB-031	15.78	1.04	100.00	2.28E+06	1.149
13C12-PCB-095	19.1	1.60	100.00	1.21E+06	0.662
13C12-PCB-153	24.19	1.29	100.00	1.41E+06	0.850

### Cleanup Standards

13C12-PCB-028	15.96	1.05	100.00	2.39E+06	1.715
13C12-PCB-111	22.03	1.60	100.00	1.71E+06	1.314
13C12-PCB-178	25.06	1.06	100.00	1.08E+06	0.848

### Injection Standards

13C12-PCB-9	11.82	1.61	100.00	2.88E+06	-
13C12-PCB-52	16.95	0.79	100.00	1.39E+06	-
13C12-PCB-101	20.63	1.59	100.00	1.30E+06	-
13C12-PCB-138	24.85	1.27	100.00	1.27E+06	-
13C12-PCB-194	31.03	0.90	100.00	1.03E+06	-

	Target Analyte	#Hom	Resp	Ra	Ra fail=YE	RT	Conc.	H/A	ical RRF	User RF	%Rec	Mod.Date	Mod.Comn	RRT	RT	LCL	RT	UCL	Acq.Date	Acq.Time	ID
1	* PCB-1			1617308.9	3.118	NO	8.84	57.03235	24.269	0.86	114.1			1	8.81	8.87	17-Sep-15	0.836076	H5-15-WDM-214		
2	PCB-2			1494558	3.155	NO	10.26	50	23.112	0.959	100			0.9881	10.22	10.29	17-Sep-15	0.836076	H5-15-WDM-214		
3	PCB-3			1533416.1	3.105	NO	10.38	55.86321	22.525		0.93	111.7		1	10.34	10.41	17-Sep-15	0.836076	H5-15-WDM-214		
4	* PCB-4			938593.1	1.599	NO	10.55	56.524	22.506	0.98	113			1.0012	10.52	10.58	17-Sep-15	0.836076	H5-15-WDM-214		
5	PCB-10			1425114.1	1.602	NO	10.67	50	23.148	1.318	100			1.0129	10.64	10.71	17-Sep-15	0.836076	H5-15-WDM-214		
6	PCB-9			1411520.9	1.547	NO	11.83	50	21.767	1.306	100			1.1227	11.8	11.86	17-Sep-15	0.836076	H5-15-WDM-214		
7	PCB-7			1402514.9	1.553	NO	11.94	50	22.323	1.297	100			1.1332	11.91	11.98	17-Sep-15	0.836076	H5-15-WDM-214		
8	PCB-6			1469083.1	1.558	NO	12.09	50	21.487	1.359	100			1.1472	12.06	12.12	17-Sep-15	0.836076	H5-15-WDM-214		
9	PCB-5			1319845	1.545	NO	12.3	50	21.999	1.221	100			1.1671	12.27	12.33	17-Sep-15	0.836076	H5-15-WDM-214		
10	PCB-8			1455080.9	1.568	NO	12.37	50	22.543	1.346	100			1.1741	12.34	12.41	17-Sep-15	0.836076	H5-15-WDM-214		
11	* PCB-14			1457973.6	1.548	NO	13.36	50	24.328	1.349	100			0.9388	13.33	13.4	17-Sep-15	0.836076	H5-15-WDM-214		
12	PCB-11			1313772.9	1.525	NO	13.87	50	23.787	1.215	100			0.9743	13.83	13.9	17-Sep-15	0.836076	H5-15-WDM-214		
13	PCB-13/12			2802064.9	1.545	NO	14.07	100	13.791	1.296	100			0.9884	14.03	14.1	17-Sep-15	0.836076	H5-15-WDM-214		
14	PCB-15			1450211.7	1.524	NO	14.24	57.56618	23.551		0.96	115.1		1.0006	14.21	14.28	17-Sep-15	0.836076	H5-15-WDM-214		
15	* PCB-19			645065.1	1.079	NO	12.57	56.67464	22.344		1.01	113.3		1.001	12.54	12.6	17-Sep-15	0.836076	H5-15-WDM-214		
16	* PCB-30/18			2005329.9	1.077	NO	13.68	100	20.842	1.134	100			1.0891	13.64	13.71	17-Sep-15	0.836076	H5-15-WDM-214		
17	PCB-17			807170.5	1.074	NO	13.94	50	23.746	0.913	100			1.1099	13.9	13.97	17-Sep-15	0.836076	H5-15-WDM-214		
18	PCB-27			1262347.6	1.073	NO	14.06	50	22.895	1.428	100			1.1196	14.03	14.09	17-Sep-15	0.836076	H5-15-WDM-214		
19	PCB-24			1181404.7	1.078	NO	14.15	50	23.207	1.336	100			1.1272	14.12	14.19	17-Sep-15	0.836076	H5-15-WDM-214		
20	PCB-16			658252.3	1.08	NO	14.22	50	23.742	0.744	100			1.1321	14.18	14.25	17-Sep-15	0.836076	H5-15-WDM-214		
21	PCB-32			1236083.8	1.083	NO	14.51	50	22.913	1.398	100			1.1556	14.48	14.55	17-Sep-15	0.836076	H5-15-WDM-214		
22	* PCB-34			1292629.7	1.02	NO	15.23	50	22.712	1.462	100			1.2126	15.19	15.26	17-Sep-15	0.836076	H5-15-WDM-214		
23	PCB-23			1314483.3	1.024	NO	15.32	50	23.02	1.487	100			1.22	15.29	15.35	17-Sep-15	0.836076	H5-15-WDM-214		
24	PCB-29/26			2169526.1	1.028	NO	15.5	100	15.359	1.227	100			1.2342	15.47	15.53	17-Sep-15	0.836076	H5-15-WDM-214		
25	PCB-25			1397652.4	1.018	NO	15.62	50	20.093	1.581	100			0.8589	15.59	15.65	17-Sep-15	0.836076	H5-15-WDM-214		
26	PCB-31			1273548.5	1.028	NO	15.8	50	22.392	1.44	100			0.8687	15.76	15.83	17-Sep-15	0.836076	H5-15-WDM-214		
27	PCB-28/20			2552678.9	1.023	NO	15.99	100	18.692	1.444	100			0.879	15.95	16.02	17-Sep-15	0.836076	H5-15-WDM-214		
28	PCB-21/33			2677625.3	1.021	NO	16.1	100	17.537	1.514	100			0.8851	16.06	16.13	17-Sep-15	0.836076	H5-15-WDM-214		
29	PCB-22			1292737.9	1.022	NO	16.34	50	22.029	1.462	100			0.8985	16.31	16.38	17-Sep-15	0.836076	H5-15-WDM-214		
30	PCB-36			1465332.2	1.043	NO	17.18	50	20.094	1.657	100			0.9444	17.14	17.21	17-Sep-15	0.836076	H5-15-WDM-214		
31	PCB-39			1208933.4	1.018	NO	17.38	50	21.036	1.367	100			0.9557	17.35	17.41	17-Sep-15	0.836076	H5-15-WDM-214		
32	PCB-38			1460014.2	1.032	NO	17.72	50	21.725	1.651	100			0.9743	17.69	17.75	17-Sep-15	0.836076	H5-15-WDM-214		
33	PCB-35			1288594.9	1.028	NO	17.96	50	21.695	1.457	100			0.9876	17.93	18	17-Sep-15	0.836076	H5-15-WDM-214		
34	PCB-37			1301504.2	1.029	NO	18.2	57.32263	21.284		0.94	114.6		1.0005	18.16	18.23	17-Sep-15	0.836076	H5-15-WDM-214		
35	* PCB-54			1805699.8	0.8	NO	14.43	116.1071	23.774		1	116.1		1.0006	14.4	14.47	17-Sep-15	0.836076	H5-15-WDM-214		
36	* PCB-50/53			3241249.5	0.795	NO	15.66	200	18.134	0.806	100			1.0855	15.62	15.69	17-Sep-15	0.836076	H5-15-WDM-214		
37	PCB-45/51			3105993.5	0.796	NO	16.07	200	13.979	0.772	100			1.1141	16.04	16.1	17-Sep-15	0.836076	H5-15-WDM-214		
38	PCB-46			1388538.6	0.794	NO	16.22	100	22.569	0.691	100			1.1244	16.19	16.25	17-Sep-15	0.836076	H5-15-WDM-214		
39	PCB-52			1612020.8	0.791	NO	16.98	100	22.495	0.802	100			1.177	16.95	17.01	17-Sep-15	0.836076	H5-15-WDM-214		
40	PCB-73			2508617.1	0.796	NO	17.05	100	20.924	1.248	100			1.1822	17.02	17.09	17-Sep-15	0.836076	H5-15-WDM-214		
41	PCB-43			1442396.5	0.798	NO	17.12	100	23.48	0.717	100			1.1868	17.09	17.15	17-Sep-15	0.836076	H5-15-WDM-214		
42	PCB-69/49			3951439.8	0.793	NO	17.23	200	15.973	0.983	100			1.1946	17.2	17.27	17-Sep-15	0.836076	H5-15-WDM-214		
43	PCB-48			1619782.3	0.794	NO	17.41	100	21.499	0.806	100			1.2069	17.38	17.44	17-Sep-15	0.836076	H5-15-WDM-214		
44	PCB-44/47/65			5793833.8	0.791	NO	17.56	300	17.989	0.961	100			1.2173	17.53	17.59	17-Sep-15	0.836076	H5-15-WDM-214		
45	PCB-59/62/75			7149327.5	0.794	NO	17.72	300	19.602	1.185	100			1.2283	17.69	17.75	17-Sep-15	0.836076	H5-15-WDM-214		
46	PCB-42			1613219.3	0.796	NO	17.83	100	22.096	0.802	100			1.2361	17.8	17.86	17-Sep-15	0.836076	H5-15-WDM-214		
47	PCB-41/71/40			5036768.3	0.793	NO	18.1	300	15.216	0.835	100			1.255	18.07	18.14	17-Sep-15	0.836076	H5-15-WDM-214		
48	PCB-64			2476549.1	0.792	NO	18.22	100	21.402	1.232	100			1.2634	18.19	18.26	17-Sep-15	0.836076	H5-15-WDM-214		
49	* PCB-72			2263369.3	0.771	NO	18.64	100	22.302	1.126	100			0.856	18.6	18.67	17-Sep-15	0.836076	H5-15-WDM-214		
50	PCB-68			2633794.1	0.779	NO	18.8	100	21.569	1.31	100			0.8633	18.76	18.83	17-Sep-15	0.836076	H5-15-WDM-214		
51	PCB-57			2250683.9	0.773	NO	19.03	100	22.02	1.119	100			0.8743	19	19.07	17-Sep-15	0.836076	H5-15-WDM-214		
52	PCB-58			2310768.2	0.771	NO	19.16	100	21.117	1.149	100			0.8984	19.12	19.19	17-Sep-15	0.836076	H5-15-WDM-214		
53	PCB-67			2841078.3	0.773	NO	19.25	100	20.826	1.413	100			0.8844	19.22	19.29	17-Sep-15	0.836076	H5-15-WDM-214		
54	PCB-63			2496524.8	0.777	NO	19.4	100	21.2	1.242	100			0.8909	19.36	19.43	17-Sep-15	0.836076	H5-15-WDM-214		
55	PCB-61/70/74/76			9488606.8	0.776	NO	19.57	400	11.668	1.18	100			0.899	19.54	19.61	17-Sep-15	0.836076	H5-15-WDM-214		
56	PCB-66			2378474.4	0.775	NO	19.76	100	20.757	1.183	100			0.9075	19.72	19.79	17-Sep-15	0.836076	H5-15-WDM-214		
57	PCB-55			2163238.6	0.777	NO	19.85	100	21.591	1.076	100			0.912	19.82	19.89	17-Sep-15	0.836076	H5-15-WDM-214		
58	PCB-56			2453931.1	0.776	NO	20.12	100	21.225	1.221	100			0.9242	20.09	20.15	17-Sep-15	0.836076	H5-15-WDM-214		
59	PCB-60			2374230.4	0.772	NO	20.24	100	21.521	1.181	100			0.9298	20.21	20.28	17-Sep-15	0.836076			

112	PCB-161	1893153.8	1.262 NO	23.96	100	19.287	1.18	100	0.9079	23.93	23.99	17-Sep-15	0.836076 H5-15-WDM-214	
113	PCB-153/168	3723237.1	1.259 NO	24.23	200	16.579	1.16	100	0.9179	24.19	24.26	17-Sep-15	0.836076 H5-15-WDM-214	
114	PCB-141	1382276.1	1.264 NO	24.33	100	19.5	0.861	100	0.9219	24.3	24.36	17-Sep-15	0.836076 H5-15-WDM-214	
115	PCB-130	1251745.6	1.251 NO	24.54	100	19.601	0.78	100	0.9298	24.5	24.57	17-Sep-15	0.836076 H5-15-WDM-214	
116	PCB-137/164	3390719	1.257 NO	24.7	200	11.101	1.057	100	0.9359	24.67	24.73	17-Sep-15	0.836076 H5-15-WDM-214	
117	PCB-138/163/129	4749374.3	1.254 NO	24.87	300	14.921	0.987	100	0.9425	24.84	24.91	17-Sep-15	0.836076 H5-15-WDM-214	
118	PCB-160	1914347.5	1.257 NO	24.98	100	18.951	1.193	100	0.9465	24.94	25.01	17-Sep-15	0.836076 H5-15-WDM-214	
119	PCB-158	2100381.2	1.265 NO	25.08	100	19.07	1.309	100	0.9504	25.05	25.12	17-Sep-15	0.836076 H5-15-WDM-214	
120	PCB-128/166	3340905.6	1.254 NO	25.55	200	17.748	1.041	100	0.968	25.51	25.58	17-Sep-15	0.836076 H5-15-WDM-214	
121	PCB-159	2032012.2	1.248 NO	26.01	100	19.104	1.266	100	0.9855	25.98	26.04	17-Sep-15	0.836076 H5-15-WDM-214	
122	PCB-162	2032049.8	1.262 NO	26.15	100	19.612	1.266	100	0.9908	26.11	26.18	17-Sep-15	0.836076 H5-15-WDM-214	
123	PCB-167	2008369.5	1.259 NO	26.4	111.5443	18.778		1.17	111.5	1.0004	26.37	26.44	17-Sep-15	0.836076 H5-15-WDM-214
124	PCB-156/157	3918766.4	1.258 NO	27.02	224.6343	15.301		1.13	112.3	1.0004	26.98	27.05	17-Sep-15	0.836076 H5-15-WDM-214
125	PCB-169	1961904.2	1.282 NO	28.66	116.2637	18.437		1.07	116.3	1.0004	28.63	28.69	17-Sep-15	0.836076 H5-15-WDM-214
126	* PCB-188	1725753.8	1.043 NO	23.53	107.189	19.58		0.96	107.2	1.001	23.5	23.56	17-Sep-15	0.836076 H5-15-WDM-214
127	PCB-179	1594946	1.048 NO	23.72	100	19.634	0.952	100	1.0089	23.68	23.75	17-Sep-15	0.836076 H5-15-WDM-214	
128	PCB-184	1819335.1	1.053 NO	23.98	100	19.34	1.083	100	1.0202	23.95	24.02	17-Sep-15	0.836076 H5-15-WDM-214	
129	PCB-176	1648918.5	1.043 NO	24.18	100	19.561	0.981	100	1.0286	24.15	24.21	17-Sep-15	0.836076 H5-15-WDM-214	
130	PCB-186	1574872.8	1.043 NO	24.43	100	19.051	0.937	100	1.0394	24.4	24.47	17-Sep-15	0.836076 H5-15-WDM-214	
131	PCB-178	1179096.4	1.049 NO	25.08	100	19.679	0.702	100	1.067	25.05	25.12	17-Sep-15	0.836076 H5-15-WDM-214	
132	PCB-175	1250971.4	1.053 NO	25.42	100	19.276	0.744	100	1.0813	25.38	25.45	17-Sep-15	0.836076 H5-15-WDM-214	
133	PCB-187	1463094.6	1.034 NO	25.56	100	19.103	0.871	100	1.0872	25.52	25.59	17-Sep-15	0.836076 H5-15-WDM-214	
134	PCB-182	1281616.2	1.049 NO	25.66	100	19.417	0.763	100	1.0916	25.63	25.69	17-Sep-15	0.836076 H5-15-WDM-214	
135	PCB-183	1284728.1	1.031 NO	25.87	100	19.597	0.764	100	1.1005	25.84	25.9	17-Sep-15	0.836076 H5-15-WDM-214	
136	PCB-185	1203762.6	1.051 NO	25.94	100	19.24	0.716	100	1.1034	25.91	25.97	17-Sep-15	0.836076 H5-15-WDM-214	
137	PCB-174	1143438.9	1.062 NO	26.01	100	19.753	0.68	100	1.1064	25.98	26.04	17-Sep-15	0.836076 H5-15-WDM-214	
138	PCB-177	1170146.9	1.051 NO	26.24	100	17.91	0.696	100	1.1163	26.21	26.27	17-Sep-15	0.836076 H5-15-WDM-214	
139	PCB-181	1234949.1	1.043 NO	26.45	100	19.063	0.735	100	1.1251	26.42	26.48	17-Sep-15	0.836076 H5-15-WDM-214	
140	PCB-171/173	2206202.3	1.046 NO	26.56	200	19.67	0.656	100	1.13	26.53	26.6	17-Sep-15	0.836076 H5-15-WDM-214	
141	PCB-172	1185005.9	1.039 NO	27.36	100	18.259	0.705	100	0.9144	27.33	27.4	17-Sep-15	0.836076 H5-15-WDM-214	
142	PCB-192	1406063.8	1.049 NO	27.51	100	19.43	0.837	100	0.9194	27.48	27.55	17-Sep-15	0.836076 H5-15-WDM-214	
143	PCB-180/193	2826529.3	1.04 NO	27.68	200	13.22	0.841	100	0.9248	27.64	27.71	17-Sep-15	0.836076 H5-15-WDM-214	
144	PCB-191	1569558.2	1.048 NO	27.87	100	19.02	0.934	100	0.9314	27.84	27.91	17-Sep-15	0.836076 H5-15-WDM-214	
145	PCB-170	1114915.1	1.039 NO	28.36	100	19.052	0.663	100	0.9476	28.33	28.39	17-Sep-15	0.836076 H5-15-WDM-214	
146	PCB-190	1680614.9	1.042 NO	28.64	100	16.842	1	100	0.9569	28.6	28.67	17-Sep-15	0.836076 H5-15-WDM-214	
147	* PCB-189	1700161.8	1.023 NO	29.94	117.0695	18.866		0.86	117.1	1.0004	29.91	29.97	17-Sep-15	0.836076 H5-15-WDM-214
148	* PCB-202	1988670.4	0.912 NO	26.29	171.5162	19.479		1	114.3	1.0004	26.25	26.32	17-Sep-15	0.836076 H5-15-WDM-214
149	PCB-201	1857918.7	0.91 NO	26.76	150	19.372	0.95	100	1.0185	26.73	26.79	17-Sep-15	0.836076 H5-15-WDM-214	
150	PCB-204	2014309.8	0.919 NO	27.11	150	19.506	1.03	100	1.0317	27.08	27.14	17-Sep-15	0.836076 H5-15-WDM-214	
151	PCB-197	1924215.2	0.919 NO	27.22	150	19.782	0.984	100	1.0361	27.19	27.26	17-Sep-15	0.836076 H5-15-WDM-214	
152	PCB-200	1859114.3	0.919 NO	27.29	150	18.838	0.951	100	1.0388	27.26	27.33	17-Sep-15	0.836076 H5-15-WDM-214	
153	PCB-198/199	2698031.4	0.914 NO	28.68	300	16.333	0.69	100	1.0917	28.65	28.72	17-Sep-15	0.836076 H5-15-WDM-214	
154	PCB-196	1319473.6	0.916 NO	29.03	150	18.975	0.675	100	0.9271	29	29.06	17-Sep-15	0.836076 H5-15-WDM-214	
155	PCB-203	1400712.6	0.905 NO	29.14	150	19.461	0.716	100	0.9304	29.1	29.17	17-Sep-15	0.836076 H5-15-WDM-214	
156	* PCB-195	1618416.4	0.903 NO	29.84	150	18.79	0.828	100	0.953	29.81	29.87	17-Sep-15	0.836076 H5-15-WDM-214	
157	PCB-194	1711164.6	0.898 NO	31.06	150	17.302	0.875	100	0.9918	31.02	31.09	17-Sep-15	0.836076 H5-15-WDM-214	
158	PCB-205	1972668.2	0.9 NO	31.33	165.2569	16.516		0.82	110.2	1.0004	31.29	31.36	17-Sep-15	0.836076 H5-15-WDM-214
159	* PCB-208	1737547.8	0.786 NO	29.7	168.4385	18.895		0.93	112.3	1.0004	29.66	29.73	17-Sep-15	0.836076 H5-15-WDM-214
160	PCB-207	1717031.6	0.796 NO	30.17	150	18.835	1.193	100	1.0164	30.14	30.2	17-Sep-15	0.836076 H5-15-WDM-214	
161	PCB-206	1191248.4	0.797 NO	32.42	169.1955	15.19		0.86	113.3	1.0008	32.39	32.45	17-Sep-15	0.836076 H5-15-WDM-214
162	* PCB-209	1637626.1	1.178 NO	33.56	186.183	13.376		0.81	124.1	1.0004	33.52	33.59	17-Sep-15	0.836076 H5-15-WDM-214
163	13C-PCB-31	2202553.9	1.057 NO	15.79	100.1216	22.801		1.24	100.1	1.2573	15.76	15.82	17-Sep-15	0.836076 H5-15-WDM-214
164	13C-PCB-95	1199300.6	1.582 NO	19.1	98.06062	21.656		0.69	98.1	1.0909	19.07	19.14	17-Sep-15	0.836076 H5-15-WDM-214
165	13C-PCB-153	1367096.6	1.295 NO	24.19	97.47717	19.314		0.87	97.5	0.9166	24.16	24.22	17-Sep-15	0.836076 H5-15-WDM-214
166	13C-PCB-28	2206005.8	1.045 NO	15.96	93.55363	22.405		1.78	93.6	0.9409	15.92	15.99	17-Sep-15	0.836076 H5-15-WDM-214
167	13C-PCB-111	1701834.4	1.057 NO	22.03	97.15375	21.058		1.32	97.2	1.0672	21.99	22.06	17-Sep-15	0.836076 H5-15-WDM-214
168	13C-PCB-178	1015434.3	1.063 NO	25.07	92.70906	19.795		0.84	92.7	1.0084	25.04	25.1	17-Sep-15	0.836076 H5-15-WDM-214
169	13C-PCB-1	3285950	3.124 NO	8.84	101.5114	24.208		1.23	101.5	0.7471	8.81	8.87	17-Sep-15	0.836076 H5-15-WDM-214
170	13C-PCB-3	2948386.6	3.076 NO	10.38	100.4438	23.2		1.12	100.4	0.8772	10.34	10.41	17-Sep-15	0.836076 H5-15-WDM-214
171	13C-PCB-4	1689238.3	1.614 NO	10.54	98.61582	22.335		0.65	98.6	0.8907	10.5	10.57	17-Sep-15	0.836076 H5-15-WDM-214
172	13C-PCB-15	2635154.5	1.568 NO	14.23	100.7581	23.865		1	100.8	1.203	14.2	14.27	17-Sep-15	0.836076 H5-15-WDM-214
173	13C-PCB-19	1121369.6	1.084 NO	12.56	95.42005	22.275		0.45	95.4	1.0614	12.52	12.59	17-Sep-15	0.836076 H5-15-WDM-214
174	13C-PCB-37	2415414.3	1.057 NO	18.19	100.2968	21.243		1.82	100.3	1.0723	18.15	18.22	17-Sep-15	0.836076 H5-15-WDM-214
175	13C-PCB-54	1561447.3	0.805 NO	14.42	94.75773	23.65		1.25	94.8	0.8505	14.39	14.46	17-Sep-15	0.836076 H5-15-WDM-214
176	13C-PCB-81	2142928.1	0.789 NO	21.77	98.84348	21.147		1.63	98.8	1.0548	21.74	21.8	17-Sep-15	0.836076 H5-15-WDM-214
177	13C-PCB-77	2327327.9	0.784 NO	22.06	98.08233	21.054		1.78	98.1	1.0689	22.03	22.1	17-Sep-15	0.836076 H5-15-WDM-214
178	13C-PCB-104	1550381.2	1.608 NO	17.51	94.61409	21.586		1.23	94.6	0.8485	17.48	17.55	17-Sep-15	

	Target Analyte	#Hom	Resp	Ra	Ra fail=YE	RT	Conc.	H/A	ical RRF	User RF	%Rec	Mod.Date	Mod.Comn	RRT	RT LCL	RT UCL	Acq.Date	Acq.Time	ID
1	* PCB-1		1402433.9	3.093	NO	8.89	56.98	22.397		0.86	114			1.0014	8.85	8.92	8-Dec-15	1:44:40	H5-15-WDM-330
2	PCB-2		1202539.2	3.129	NO	10.29	50	21.128	0.894		100			0.9894	10.26	10.33	8-Dec-15	1:44:40	H5-15-WDM-330
3	PCB-3		1341180.4	3.094	NO	10.41	56.98	19.522		0.93	114			1.0012	10.38	10.45	8-Dec-15	1:44:40	H5-15-WDM-330
4	* PCB-4		847412.6	1.515	NO	10.59	49.51	21.425		0.98	99			1.0012	10.55	10.62	8-Dec-15	1:44:40	H5-15-WDM-330
5	PCB-10		1358962.9	1.528	NO	10.7	50	19.418	1.32		100			1.0116	10.66	10.73	8-Dec-15	1:44:40	H5-15-WDM-330
6	PCB-9		1093093.2	1.517	NO	11.86	50	21	1.061		100			1.1211	11.82	11.89	8-Dec-15	1:44:40	H5-15-WDM-330
7	PCB-7		1246632.7	1.505	NO	11.97	50	18.4	1.211		100			1.1316	11.93	12	8-Dec-15	1:44:40	H5-15-WDM-330
8	PCB-6		1288498.1	1.522	NO	12.11	50	18.623	1.251		100			1.1455	12.08	12.15	8-Dec-15	1:44:40	H5-15-WDM-330
9	PCB-5		1042860.1	1.509	NO	12.32	50	20.705	1.013		100			1.1653	12.29	12.36	8-Dec-15	1:44:40	H5-15-WDM-330
10	PCB-8		1455940.2	1.527	NO	12.39	50	17.017	1.414		100			1.1711	12.35	12.42	8-Dec-15	1:44:40	H5-15-WDM-330
11	* PCB-14		1129281.6	1.505	NO	13.36	50	19.788	1.097		100			0.9377	13.33	13.4	8-Dec-15	1:44:40	H5-15-WDM-330
12	PCB-11		1066064.7	1.511	NO	13.88	50	18.657	1.035		100			0.9737	13.84	13.91	8-Dec-15	1:44:40	H5-15-WDM-330
13	PCB-13/12		2302434.8	1.499	NO	14.08	100	13.272	1.118		100			0.9878	14.04	14.11	8-Dec-15	1:44:40	H5-15-WDM-330
14	PCB-15		1284690.4	1.508	NO	14.26	56.63	17.542		0.95	113.3			1.0006	14.23	14.29	8-Dec-15	1:44:40	H5-15-WDM-330
15	* PCB-19		753910.3	1.079	NO	12.59	55.41	19.368		1.01	110.8			1.001	12.56	12.63	8-Dec-15	1:44:40	H5-15-WDM-330
16	* PCB-30/18		1941411.3	1.084	NO	13.68	100	14.495	1.131		100			1.0869	13.64	13.71	8-Dec-15	1:44:40	H5-15-WDM-330
17	PCB-17		799039.9	1.085	NO	13.95	50	21.333	0.931		100			1.1084	13.91	13.98	8-Dec-15	1:44:40	H5-15-WDM-330
18	PCB-27		1155775.3	1.103	NO	14.08	50	21.176	1.346		100			1.1188	14.04	14.11	8-Dec-15	1:44:40	H5-15-WDM-330
19	PCB-24		1148427.8	1.077	NO	14.16	50	20.986	1.338		100			1.1257	14.13	14.2	8-Dec-15	1:44:40	H5-15-WDM-330
20	PCB-16		800442.3	1.084	NO	14.23	50	18.61	0.932		100			1.1312	14.2	14.27	8-Dec-15	1:44:40	H5-15-WDM-330
21	PCB-32		1310306.5	1.079	NO	14.52	50	20.095	1.526		100			1.1541	14.49	14.55	8-Dec-15	1:44:40	H5-15-WDM-330
22	* PCB-34		1018801.1	1.005	NO	15.22	50	21.027	1.187		100			0.8367	15.18	15.25	8-Dec-15	1:44:40	H5-15-WDM-330
23	PCB-23		1228398.6	1.013	NO	15.31	50	18.667	1.431		100			0.8419	15.28	15.34	8-Dec-15	1:44:40	H5-15-WDM-330
24	PCB-29/26		1966072.5	1.013	NO	15.5	100	16.461	1.145		100			0.8522	15.47	15.53	8-Dec-15	1:44:40	H5-15-WDM-330
25	PCB-25		1335638.4	1.003	NO	15.62	50	16.399	1.556		100			0.8589	15.59	15.65	8-Dec-15	1:44:40	H5-15-WDM-330
26	PCB-31		1148997.7	1.01	NO	15.8	50	18.655	1.338		100			0.8687	15.76	15.83	8-Dec-15	1:44:40	H5-15-WDM-330
27	PCB-28/20		2163627.6	1.01	NO	15.99	100	15.292	1.26		100			0.879	15.95	16.02	8-Dec-15	1:44:40	H5-15-WDM-330
28	PCB-21/33		2553218.9	1.001	NO	16.11	100	14.543	1.487		100			0.8857	16.07	16.14	8-Dec-15	1:44:40	H5-15-WDM-330
29	PCB-22		1103553.4	1.018	NO	16.34	50	17.938	1.286		100			0.8985	16.31	16.38	8-Dec-15	1:44:40	H5-15-WDM-330
30	PCB-36		1231264.6	1.009	NO	17.18	50	16.045	1.434		100			0.9444	17.14	17.21	8-Dec-15	1:44:40	H5-15-WDM-330
31	PCB-39		1090853.8	1.002	NO	17.38	50	17.484	1.271		100			0.9557	17.35	17.41	8-Dec-15	1:44:40	H5-15-WDM-330
32	PCB-38		1183870.4	1.011	NO	17.72	50	18.524	1.379		100			0.9743	17.69	17.75	8-Dec-15	1:44:40	H5-15-WDM-330
33	PC-35		1087409.2	1.012	NO	17.97	50	16.252	1.267		100			0.9882	17.94	18	8-Dec-15	1:44:40	H5-15-WDM-330
34	PCB-37		1088285.6	1.005	NO	18.2	55.44	16.031		0.94	110.9			1.0005	18.16	18.23	8-Dec-15	1:44:40	H5-15-WDM-330
35	* PCB-54		2283628.3	0.79	NO	14.45	112.02	20.768		0.99	112			1.0012	14.42	14.48	8-Dec-15	1:44:40	H5-15-WDM-330
36	* PCB-50/53		3451703	0.78	NO	15.66	200	19.108	0.86		100			1.0848	15.62	15.69	8-Dec-15	1:44:40	H5-15-WDM-330
37	PCB-45/51		3243017.6	0.78	NO	16.07	200	15.152	0.808		100			1.1134	16.04	16.1	8-Dec-15	1:44:40	H5-15-WDM-330
38	PCB-46		1418886	0.778	NO	16.23	100	18.883	0.707		100			1.1244	16.2	16.26	8-Dec-15	1:44:40	H5-15-WDM-330
39	PCB-52		15273434	0.776	NO	16.97	100	20.858	0.762		100			1.1757	16.94	17	8-Dec-15	1:44:40	H5-15-WDM-330
40	PCB-73		2210496.8	0.78	NO	17.04	100	20.178	1.102		100			1.1809	17.01	17.08	8-Dec-15	1:44:40	H5-15-WDM-330
41	PCB-43		1469376.6	0.78	NO	17.11	100	20.311	0.733		100			1.1854	17.08	17.14	8-Dec-15	1:44:40	H5-15-WDM-330
42	PCB-69/49		4088050	0.784	NO	17.21	200	12.773	1.019		100			1.1926	17.18	17.25	8-Dec-15	1:44:40	H5-15-WDM-330
43	PCB-48		1648181.9	0.781	NO	17.4	100	19.068	0.822		100			1.2055	17.37	17.43	8-Dec-15	1:44:40	H5-15-WDM-330
44	PCB-44/47/65		5844823.8	0.782	NO	17.55	300	18.061	0.971		100			1.2159	17.52	17.58	8-Dec-15	1:44:40	H5-15-WDM-330
45	PCB-59/62/75		6969240.8	0.78	NO	17.71	300	18.66	1.163		100			1.2227	17.68	17.74	8-Dec-15	1:44:40	H5-15-WDM-330
46	PCB-42		1739880.3	0.779	NO	17.83	100	17.525	0.867		100			1.2354	17.8	17.86	8-Dec-15	1:44:40	H5-15-WDM-330
47	PCB-41/71/40		4798878.3	0.785	NO	18.1	300	13.099	0.798		100			1.2542	18.07	18.14	8-Dec-15	1:44:40	H5-15-WDM-330
48	PCB-64		2543285.6	0.783	NO	18.22	100	18.076	1.268		100			1.262	18.18	18.25	8-Dec-15	0.072685	H5-15-WDM-330
49	* PCB-72		1892024.9	0.754	NO	18.62	100	19.285	0.943		100			0.8556	18.58	18.65	8-Dec-15	0.072685	H5-15-WDM-330
50	PCB-68		2432079.8	0.761	NO	18.78	100	17.697	1.213		100			0.8633	18.75	18.82	8-Dec-15	0.072685	H5-15-WDM-330
51	PCB-57		1941521.5	0.761	NO	19.01	100	18.961	0.968		100			0.8738	18.98	19.05	8-Dec-15	0.072685	H5-15-WDM-330
52	PCB-58		1848856.3	0.761	NO	19.15	100	19.455	0.922		100			0.8803	19.12	19.19	8-Dec-15	1:44:40	H5-15-WDM-330
53	PCB-67		2561992.6	0.757	NO	19.24	100	17.176	1.277		100			0.8844	19.21	19.28	8-Dec-15	1:44:40	H5-15-WDM-330
54	PCB-63		2127799.1	0.756	NO	19.38	100	18.312	1.061		100			0.8909	19.35	19.42	8-Dec-15	1:44:40	H5-15-WDM-330
55	PCB-61/70/74/76		8465764	0.765	NO	19.57	400	10.79	1.055		100			0.8994	19.54	19.6	8-Dec-15	1:44:40	H5-15-WDM-330
56	PCB-66		2057821.1	0.756	NO	19.75	100	18.217	1.026		100			0.9075	19.71	19.78	8-Dec-15	1:44:40	H5-15-WDM-330
57	PCB-55		2137074.4	0.756	NO	19.85	100	17.505	1.065		100			0.9124	19.82	19.89	8-Dec-15	1:44:40	H5-15-WDM-330
58	PCB-56		2043039.9	0.756	NO	20.12	100	18.379	1.019		100			0.9245	20.08	20.15	8-Dec-15	1:44:40	H5-15-WDM-330
59	PCB-60		2120976.1	0.759	NO	20.24	100	17.733	1.057		100			0.9302	20.21	20.27	8-Dec-15	1:44:40	H5-15-WDM-330
60	PCB-80		2357914.4	0.771	NO	20.38	100	17.511	1.176		100			0.9367	20.35</td				

112	PCB-161	2043104.5	1.244 NO	23.93	100	17.619	1.084	100	0.9078	23.9	23.97	8-Dec-15	1:44:40 H5-15-WDM-330	
113	PCB-153/168	3871822.3	1.235 NO	24.2	200	15.756	1.027	100	0.9179	24.17	24.23	8-Dec-15	1:44:40 H5-15-WDM-330	
114	PCB-141	1518997.5	1.237 NO	24.3	100	17.278	0.806	100	0.9218	24.27	24.34	8-Dec-15	1:44:40 H5-15-WDM-330	
115	PCB-130	1297712.8	1.232 NO	24.52	100	18.383	0.689	100	0.9302	24.49	24.56	8-Dec-15	1:44:40 H5-15-WDM-330	
116	PCB-137/164	2871749.1	0.734 YES	24.7	200	17.594	0.762	100	0.9368	24.66	24.73	8-Dec-15	1:44:40 H5-15-WDM-330	
117	PCB-138/163/129	4938239.3	1.231 NO	24.86	300	14.04	0.874	100	0.9429	24.83	24.89	8-Dec-15	1:44:40 H5-15-WDM-330	
118	PCB-160	2184648.6	1.238 NO	24.96	100	17.65	1.159	100	0.9469	24.93	25	8-Dec-15	1:44:40 H5-15-WDM-330	
119	PCB-158	2409831.8	1.239 NO	25.06	100	17.375	1.279	100	0.9504	25.02	25.09	8-Dec-15	1:44:40 H5-15-WDM-330	
120	PCB-128/166	3833264.5	1.23 NO	25.53	200	14.496	1.017	100	0.9684	25.5	25.56	8-Dec-15	1:44:40 H5-15-WDM-330	
121	PCB-159	2244243.8	1.234 NO	25.98	100	17.503	1.191	100	0.9855	25.95	26.02	8-Dec-15	1:44:40 H5-15-WDM-330	
122	PCB-162	2396369.4	1.246 NO	26.13	100	16.605	1.272	100	0.9912	26.1	26.17	8-Dec-15	1:44:40 H5-15-WDM-330	
123	PCB-167	2175167.8	1.229 NO	26.38	107.33	17.277		1.17	107.3	1.004	26.34	26.41	8-Dec-15	1:44:40 H5-15-WDM-330
124	PCB-156/157	4525277.3	1.243 NO	27	216.93	13.177		1.13	108.5	1.0004	26.97	27.03	8-Dec-15	1:44:40 H5-15-WDM-330
125	PCB-169	2233187.9	1.259 NO	28.65	108.65	16.465		1.07	108.6	1.0004	28.61	28.68	8-Dec-15	1:44:40 H5-15-WDM-330
126	* PCB-188	2031080.7	1.028 NO	23.49	90.29	18.452		1.07	90.3	1.0005	23.46	23.53	8-Dec-15	1:44:40 H5-15-WDM-330
127	PCB-179	1823969.2	1.031 NO	23.7	100	17.599	0.989	100	1.0094	23.67	23.73	8-Dec-15	1:44:40 H5-15-WDM-330	
128	PCB-184	2133464	1.025 NO	23.94	100	18.784	1.157	100	1.0197	23.91	23.98	8-Dec-15	1:44:40 H5-15-WDM-330	
129	PCB-176	1932345.9	1.035 NO	24.16	100	18.073	1.048	100	1.0291	24.13	24.2	8-Dec-15	1:44:40 H5-15-WDM-330	
130	PCB-186	1945869.1	1.026 NO	24.42	100	17.829	1.055	100	1.0399	24.39	24.45	8-Dec-15	1:44:40 H5-15-WDM-330	
131	PCB-178	1445158.9	1.034 NO	25.07	100	18.147	0.784	100	1.0676	25.03	25.1	8-Dec-15	1:44:40 H5-15-WDM-330	
132	PCB-175	1611387.6	1.024 NO	25.39	100	18.462	0.874	100	1.0814	25.36	25.43	8-Dec-15	1:44:40 H5-15-WDM-330	
133	PCB-187	1845650.1	1.021 NO	25.53	100	18.367	1.001	100	1.0873	25.5	25.56	8-Dec-15	1:44:40 H5-15-WDM-330	
134	PCB-182	1650725.2	1.021 NO	25.62	100	17.772	0.895	100	1.0912	25.59	25.66	8-Dec-15	1:44:40 H5-15-WDM-330	
135	PCB-183	1530426.8	1.03 NO	25.84	100	19.174	0.83	100	1.1006	25.81	25.88	8-Dec-15	1:44:40 H5-15-WDM-330	
136	PCB-185	1581091.3	1.026 NO	25.92	100	17.275	0.857	100	1.1041	25.89	25.96	8-Dec-15	1:44:40 H5-15-WDM-330	
137	PCB-174	1480246	1.035 NO	25.99	100	18.39	0.803	100	1.107	25.96	26.03	8-Dec-15	1:44:40 H5-15-WDM-330	
138	PCB-177	1426709.7	1.04 NO	26.23	100	17.372	0.774	100	1.1169	26.19	26.26	8-Dec-15	1:44:40 H5-15-WDM-330	
139	PCB-181	1574968.7	1.037 NO	26.42	100	18.594	0.854	100	1.0884	26.39	26.46	8-Dec-15	1:44:40 H5-15-WDM-330	
140	PCB-171/173	2881626.1	1.039 NO	26.55	200	17.892	0.781	100	1.0876	26.52	26.58	8-Dec-15	1:44:40 H5-15-WDM-330	
141	PCB-172	1506873.1	1.02 NO	27.34	100	17.783	0.817	100	0.9139	27.3	27.37	8-Dec-15	1:44:40 H5-15-WDM-330	
142	PCB-192	1908545.6	1.029 NO	27.49	100	18.456	1.035	100	0.919	27.45	27.52	8-Dec-15	1:44:40 H5-15-WDM-330	
143	PCB-180/193	3785928.8	1.032 NO	27.65	200	13.628	1.027	100	0.9244	27.62	27.68	8-Dec-15	1:44:40 H5-15-WDM-330	
144	PCB-191	2072680.3	1.028 NO	27.86	100	18.012	1.124	100	0.9314	27.82	27.89	8-Dec-15	1:44:40 H5-15-WDM-330	
145	PCB-170	1499421.5	1.005 NO	28.34	100	17.116	0.813	100	0.9476	28.31	28.38	8-Dec-15	1:44:40 H5-15-WDM-330	
146	PCB-190	2257481.1	1.014 NO	28.62	100	16.059	1.224	100	0.9569	28.59	28.66	8-Dec-15	1:44:40 H5-15-WDM-330	
147	* PCB-189	1645890.1	1.03 NO	29.92	120.45	17.284		0.86	120.4	1.0004	29.98	29.96	8-Dec-15	1:44:40 H5-15-WDM-330
148	* PCB-202	3037899.6	0.901 NO	26.26	165.09	18.626		1.01	110.1	1.0004	26.23	26.29	8-Dec-15	1:44:40 H5-15-WDM-330
149	PCB-201	2894116.5	0.9 NO	26.73	150	18.691	1.153	100	1.0185	26.7	26.77	8-Dec-15	1:44:40 H5-15-WDM-330	
150	PCB-204	3213390.8	0.9 NO	27.07	150	18.364	1.28	100	1.0313	27.04	27.1	8-Dec-15	0.072685 H5-15-WDM-330	
151	PCB-197	3021178.4	0.898 NO	27.2	150	18.832	1.204	100	1.0362	27.16	27.23	8-Dec-15	0.072685 H5-15-WDM-330	
152	PCB-200	3080247.9	0.901 NO	27.28	150	17.8	1.227	100	1.0393	27.25	27.31	8-Dec-15	0.072685 H5-15-WDM-330	
153	PCB-198/199	439949.6	0.894 NO	28.67	300	14.976	0.877	100	0.9164	28.64	28.7	8-Dec-15	0.072685 H5-15-WDM-330	
154	PCB-196	2132024.8	0.898 NO	29	150	18.298	0.849	100	0.9271	28.97	29.04	8-Dec-15	1:44:40 H5-15-WDM-330	
155	PCB-203	2365553.1	0.902 NO	29.11	150	18.466	0.942	100	0.9304	29.08	29.14	8-Dec-15	1:44:40 H5-15-WDM-330	
156	* PCB-195	1800539.1	0.909 NO	29.83	150	17.361	0.717	100	0.9533	29.79	29.86	8-Dec-15	1:44:40 H5-15-WDM-330	
157	PCB-194	1786224.4	0.901 NO	31.03	150	16.417	0.712	100	0.9918	31	31.06	8-Dec-15	1:44:40 H5-15-WDM-330	
158	PCB-205	2143442.4	0.9 NO	31.3	171.85	15.942		0.82	114.6	1.0004	31.26	31.33	8-Dec-15	1:44:40 H5-15-WDM-330
159	* PCB-208	2266169.9	0.794 NO	29.67	173.34	18.429		0.93	115.6	1.0004	29.63	29.7	8-Dec-15	1:44:40 H5-15-WDM-330
160	PCB-207	2168435.7	0.792 NO	30.14	150	18.29	1.211	100	1.0164	30.11	30.18	8-Dec-15	1:44:40 H5-15-WDM-330	
161	PCB-206	1525128	0.794 NO	32.38	179.93	14.398		0.86	120	1.0008	32.35	32.41	8-Dec-15	1:44:40 H5-15-WDM-330
162	* PCB-209	1841865.8	1.178 NO	33.51	184.8	13.305		0.81	123.2	1.0009	33.47	33.54	8-Dec-15	1:44:40 H5-15-WDM-330
163	13C-PCB-31	2031243.4	1.048 NO	15.79	95.18	19.023		1.24	95.2	0.8681	15.76	15.82	8-Dec-15	1:44:40 H5-15-WDM-330
164	13C-PCB-95	1083774.4	1.588 NO	19.09	89.86	18.813		0.69	89.9	1.0914	19.06	19.13	8-Dec-15	1:44:40 H5-15-WDM-330
165	13C-PCB-153	1496782.9	1.285 NO	24.16	91	18.043		0.87	91	1.179	24.13	24.2	8-Dec-15	1:44:40 H5-15-WDM-330
166	13C-PCB-28	2204361.9	1.03 NO	15.96	92.95	18.318		1.77	92.9	0.9409	15.92	15.99	8-Dec-15	1:44:40 H5-15-WDM-330
167	13C-PCB-111	1710940.5	1.587 NO	22.01	102.33	19.371		1.32	102.3	1.0672	21.97	22.04	8-Dec-15	1:44:40 H5-15-WDM-330
168	13C-PCB-178	1374714.5	1.059 NO	25.04	109.99	18.168		0.84	110	1.0079	25.01	25.08	8-Dec-15	1:44:40 H5-15-WDM-330
169	13C-PCB-1	2848807	3.152 NO	8.88	95.64	21.686		1.24	95.6	0.7495	8.84	8.91	8-Dec-15	1:44:40 H5-15-WDM-330
170	13C-PCB-3	2531156.6	3.115 NO	10.4	93.87	18.936		1.12	93.9	0.8784	10.37	10.44	8-Dec-15	1:44:40 H5-15-WDM-330
171	13C-PCB-4	1741242.9	1.59 NO	10.58	110.56	20.389		0.65	110.6	0.8829	10.54	10.61	8-Dec-15	1:44:40 H5-15-WDM-330
172	13C-PCB-15	2378148.3	1.587 NO	14.25	98.5	18.007		1	98.5	1.2033	14.22	14.28	8-Dec-15	1:44:40 H5-15-WDM-330
173	13C-PCB-19	1343136.7	1.089 NO	12.58	124.03	19.175		0.45	124	1.0624	12.55	12.62	8-Dec-15	1:44:40 H5-15-WDM-330
174	13C-PCB-37	2090555.1	1.05 NO	18.19	86.01	16.542		1.82	86	1.0724	18.15	18.22	8-Dec-15	1:44:40 H5-15-WDM-330
175	13C-PCB-54	2051075.2	0.79 NO	14.43	123.76	20.595		1.24	123.8	0.851	14.4	14.47	8-Dec-15	1:44:40 H5-15-WDM-330
176	13C-PCB-81	1923260.5	0.804 NO	21.76	92.83	17.224		1.63	92.8	1.0552	21.73	21.79	8-Dec-15	1:44:40 H5-15-WDM-330
177	13C-PCB-77	2042923.9	0.799 NO	22.06	89.9	16.35		1.79	89.9	1.0698	22.03	22.09	8-Dec-15	1:44:40 H5-15-WDM-330
178	13C-PCB-104	1863738.1	1.576 NO	17.49	119.16	19.697		1.23	119.2	1.0315	17.46	17.53	8-Dec-15	1:44:40 H5-15-WDM-330
179	13C-PCB-123	1732702.1	1.612 NO	23.06	97.84	17.542		1.4	97.8	1.1185	23.03	23.1	8-Dec-15	1:44:40 H5-15-WDM-330
180	13													

ALS Life sciences

## **Continuing Calibration Report**

<b>Sample Name</b>	<b>CCV</b>	<b>Sampling Date</b>	n/a	
ALS Sample ID	H5-15-CCV-574	Extraction Date	n/a	
Analysis Method	EPA 1668A	Sample Size	1	n/a
Analysis Type	CCV	Percent Moisture	n/a	
Sample Matrix	QC	Split Ratio	1	

Approved:  
*E. Sabljic*  
--e-signature--

11-Dec-2015

## Run Information

Run 1

Filename	5-151207C18
Run Date	08-Dec-15 02:22
Final Volume	25 uL
Dilution Factor	1
Analysis Units	%
Instrument - Column	HRMSS SPBOCTYL56284-02B

a

Approved:  
*E. Sabljic*  
--e-signature--  
11-Dec-2015

### Target Analytes

**Ret.                      Limits**

PCB-001	50	8.86	104	70-130
PCB-003	50	10.39	101	70-130
PCB-004	50	10.56	94	70-130
PCB-015	50	14.23	96	70-130
PCB-019	50	12.57	98	70-130
PCB-037	50	18.18	99	70-130
PCB-054	50	14.42	98	70-130
PCB-081	50	21.75	102	70-130
PCB-077	50	22.05	98	70-130
PCB-104	50	17.48	102	70-130
PCB-123	50	23.05	103	70-130
PCB-118	50	23.23	102	70-130
PCB-114	50	23.52	102	70-130
PCB-105	50	23.86	102	70-130
PCB-126	50	25.45	102	70-130
PCB-155	50	20.48	102	70-130
PCB-167	50	26.35	99	70-130
PCB-156/157	100	26.98	98	70-130
PCB-169	50	28.62	99	70-130
PCB-188	50	23.47	99	70-130
PCB-189	50	29.90	101	70-130
PCB-202	50	26.24	101	70-130
PCB-205	50	31.29	104	70-130
PCB-208	50	29.64	108	70-130
PCB-206	50	32.36	110	70-130
PCB-209	50	33.48	104	70-130

## Extraction Standards

Time % Rec Limits

13C12-PCB-001	100	8.86	85	50-150
13C12-PCB-003	100	10.38	86	50-150
13C12-PCB-004	100	10.55	99	50-150
13C12-PCB-015	100	14.22	77	50-150
13C12-PCB-019	100	12.56	124	50-150
13C12-PCB-037	100	18.16	94	50-150
13C12-PCB-054	100	14.41	155	50-150
13C12-PCB-081	100	21.74	100	50-150
13C12-PCB-077	100	22.04	93	50-150
13C12-PCB-104	100	17.48	106	50-150
13C12-PCB-123	100	23.04	106	50-150
13C12-PCB-118	100	23.21	104	50-150
13C12-PCB-114	100	23.50	106	50-150
13C12-PCB-105	100	23.85	106	50-150
13C12-PCB-126	100	25.44	118	50-150
13C12-PCB-155	100	20.47	120	50-150
13C12-PCB-167	100	26.34	102	50-150
13C12-PCB-156/157	200	26.97	106	50-150
13C12-PCB-169	100	28.61	106	50-150
13C12-PCB-188	100	23.46	106	50-150
13C12-PCB-189	100	29.89	88	50-150
13C12-PCB-202	100	26.23	138	50-150
13C12-PCB-205	100	31.26	101	50-150
13C12-PCB-208	100	29.63	112	50-150
13C12-PCB-206	100	32.33	111	50-150
13C12-PCB-209	100	33.46	105	50-150

## Cleanup Standards

13C12-PCB-028	100	15.93	109	60-130
13C12-PCB-111	100	21.98	108	60-130
13C12-PCB-178	100	25.02	116	60-130

# ALS Life sciences

## Continuing Calibration Report

<b>Sample Name</b>	<b>CCV</b>	Sampling Date	n/a	Approved: <i>E. Sabljic</i> -e-signature-- 11-Dec-2015																																																																																																																																																																																																																																																																																																							
ALS Sample ID	H5-15-CCV-575	Extraction Date	n/a																																																																																																																																																																																																																																																																																																								
Analysis Method	EPA 1668A	Sample Size	1																																																																																																																																																																																																																																																																																																								
Analysis Type	CCV	Percent Moisture	n/a																																																																																																																																																																																																																																																																																																								
Sample Matrix	QC	Split Ratio	1																																																																																																																																																																																																																																																																																																								
<b>Run Information</b>		<b>Run 1</b>																																																																																																																																																																																																																																																																																																									
Filename	5-151207C32																																																																																																																																																																																																																																																																																																										
Run Date	08-Dec-15 11:35																																																																																																																																																																																																																																																																																																										
Final Volume	25 uL																																																																																																																																																																																																																																																																																																										
Dilution Factor	1																																																																																																																																																																																																																																																																																																										
Analysis Units	%																																																																																																																																																																																																																																																																																																										
Instrument - Column	HRMS5 SPBOCTYL56284-02B																																																																																																																																																																																																																																																																																																										
<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2" style="width: 20%;">Target Analytes</th> <th style="width: 15%;">Ret.</th> <th colspan="2">Limits</th> <th rowspan="2">Flags</th> </tr> <tr> <th style="width: 15%;">Time</th> <th style="width: 15%;">% Rec</th> <th style="width: 15%;"> </th> </tr> </thead> <tbody> <tr><td>PCB-001</td><td>50</td><td>8.88</td><td>103</td><td>70-130</td></tr> <tr><td>PCB-003</td><td>50</td><td>10.39</td><td>100</td><td>70-130</td></tr> <tr><td>PCB-004</td><td>50</td><td>10.56</td><td>92</td><td>70-130</td></tr> <tr><td>PCB-015</td><td>50</td><td>14.23</td><td>100</td><td>70-130</td></tr> <tr><td>PCB-019</td><td>50</td><td>12.57</td><td>96</td><td>70-130</td></tr> <tr><td>PCB-037</td><td>50</td><td>18.18</td><td>107</td><td>70-130</td></tr> <tr><td>PCB-054</td><td>50</td><td>14.42</td><td>96</td><td>70-130</td></tr> <tr><td>PCB-081</td><td>50</td><td>21.76</td><td>102</td><td>70-130</td></tr> <tr><td>PCB-077</td><td>50</td><td>22.06</td><td>98</td><td>70-130</td></tr> <tr><td>PCB-104</td><td>50</td><td>17.48</td><td>99</td><td>70-130</td></tr> <tr><td>PCB-123</td><td>50</td><td>23.05</td><td>102</td><td>70-130</td></tr> <tr><td>PCB-118</td><td>50</td><td>23.23</td><td>105</td><td>70-130</td></tr> <tr><td>PCB-114</td><td>50</td><td>23.53</td><td>101</td><td>70-130</td></tr> <tr><td>PCB-105</td><td>50</td><td>23.87</td><td>103</td><td>70-130</td></tr> <tr><td>PCB-126</td><td>50</td><td>25.45</td><td>102</td><td>70-130</td></tr> <tr><td>PCB-155</td><td>50</td><td>20.48</td><td>99</td><td>70-130</td></tr> <tr><td>PCB-167</td><td>50</td><td>26.36</td><td>99</td><td>70-130</td></tr> <tr><td>PCB-156/157</td><td>100</td><td>26.98</td><td>98</td><td>70-130</td></tr> <tr><td>PCB-169</td><td>50</td><td>28.62</td><td>99</td><td>70-130</td></tr> <tr><td>PCB-188</td><td>50</td><td>23.48</td><td>98</td><td>70-130</td></tr> <tr><td>PCB-189</td><td>50</td><td>29.90</td><td>103</td><td>70-130</td></tr> <tr><td>PCB-202</td><td>50</td><td>26.24</td><td>100</td><td>70-130</td></tr> <tr><td>PCB-205</td><td>50</td><td>31.29</td><td>103</td><td>70-130</td></tr> <tr><td>PCB-208</td><td>50</td><td>29.64</td><td>107</td><td>70-130</td></tr> <tr><td>PCB-206</td><td>50</td><td>32.36</td><td>110</td><td>70-130</td></tr> <tr><td>PCB-209</td><td>50</td><td>33.48</td><td>103</td><td>70-130</td></tr> <tr> <td> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 20%;">Extraction Standards</th> <th style="width: 15%;">Time</th> <th style="width: 15%;">% Rec</th> <th style="width: 15%;">Limits</th> <th style="width: 15%;"> </th> </tr> </thead> <tbody> <tr><td>13C12-PCB-001</td><td>100</td><td>8.86</td><td>87</td><td>50-150</td></tr> <tr><td>13C12-PCB-003</td><td>100</td><td>10.39</td><td>84</td><td>50-150</td></tr> <tr><td>13C12-PCB-004</td><td>100</td><td>10.55</td><td>103</td><td>50-150</td></tr> <tr><td>13C12-PCB-015</td><td>100</td><td>14.22</td><td>77</td><td>50-150</td></tr> <tr><td>13C12-PCB-019</td><td>100</td><td>12.56</td><td>137</td><td>50-150</td></tr> <tr><td>13C12-PCB-037</td><td>100</td><td>18.17</td><td>81</td><td>50-150</td></tr> <tr><td>13C12-PCB-054</td><td>100</td><td>14.41</td><td>146</td><td>50-150</td></tr> <tr><td>13C12-PCB-081</td><td>100</td><td>21.74</td><td>92</td><td>50-150</td></tr> <tr><td>13C12-PCB-077</td><td>100</td><td>22.04</td><td>87</td><td>50-150</td></tr> <tr><td>13C12-PCB-104</td><td>100</td><td>17.48</td><td>104</td><td>50-150</td></tr> <tr><td>13C12-PCB-123</td><td>100</td><td>23.04</td><td>103</td><td>50-150</td></tr> <tr><td>13C12-PCB-118</td><td>100</td><td>23.21</td><td>98</td><td>50-150</td></tr> <tr><td>13C12-PCB-114</td><td>100</td><td>23.52</td><td>101</td><td>50-150</td></tr> <tr><td>13C12-PCB-105</td><td>100</td><td>23.86</td><td>102</td><td>50-150</td></tr> <tr><td>13C12-PCB-126</td><td>100</td><td>25.44</td><td>93</td><td>50-150</td></tr> <tr><td>13C12-PCB-155</td><td>100</td><td>20.47</td><td>112</td><td>50-150</td></tr> <tr><td>13C12-PCB-167</td><td>100</td><td>26.34</td><td>100</td><td>50-150</td></tr> <tr><td>13C12-PCB-156/157</td><td>200</td><td>26.97</td><td>100</td><td>50-150</td></tr> <tr><td>13C12-PCB-169</td><td>100</td><td>28.62</td><td>95</td><td>50-150</td></tr> <tr><td>13C12-PCB-188</td><td>100</td><td>23.46</td><td>110</td><td>50-150</td></tr> <tr><td>13C12-PCB-189</td><td>100</td><td>29.89</td><td>79</td><td>50-150</td></tr> <tr><td>13C12-PCB-202</td><td>100</td><td>26.23</td><td>146</td><td>50-150</td></tr> <tr><td>13C12-PCB-205</td><td>100</td><td>31.27</td><td>112</td><td>50-150</td></tr> <tr><td>13C12-PCB-208</td><td>100</td><td>29.63</td><td>113</td><td>50-150</td></tr> <tr><td>13C12-PCB-206</td><td>100</td><td>32.33</td><td>125</td><td>50-150</td></tr> <tr><td>13C12-PCB-209</td><td>100</td><td>33.46</td><td>116</td><td>50-150</td></tr> <tr> <td colspan="5"> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 20%;">Cleanup Standards</th> <th style="width: 15%;"> </th> <th style="width: 15%;"> </th> <th style="width: 15%;"> </th> <th style="width: 15%;"> </th> </tr> </thead> <tbody> <tr><td>13C12-PCB-028</td><td>100</td><td>15.94</td><td>102</td><td>60-130</td></tr> <tr><td>13C12-PCB-111</td><td>100</td><td>21.99</td><td>100</td><td>60-130</td></tr> <tr><td>13C12-PCB-178</td><td>100</td><td>25.03</td><td>120</td><td>60-130</td></tr> </tbody> </table> </td></tr> </tbody></table> </td></tr></tbody></table>	Target Analytes	Ret.	Limits		Flags	Time	% Rec		PCB-001	50	8.88	103	70-130	PCB-003	50	10.39	100	70-130	PCB-004	50	10.56	92	70-130	PCB-015	50	14.23	100	70-130	PCB-019	50	12.57	96	70-130	PCB-037	50	18.18	107	70-130	PCB-054	50	14.42	96	70-130	PCB-081	50	21.76	102	70-130	PCB-077	50	22.06	98	70-130	PCB-104	50	17.48	99	70-130	PCB-123	50	23.05	102	70-130	PCB-118	50	23.23	105	70-130	PCB-114	50	23.53	101	70-130	PCB-105	50	23.87	103	70-130	PCB-126	50	25.45	102	70-130	PCB-155	50	20.48	99	70-130	PCB-167	50	26.36	99	70-130	PCB-156/157	100	26.98	98	70-130	PCB-169	50	28.62	99	70-130	PCB-188	50	23.48	98	70-130	PCB-189	50	29.90	103	70-130	PCB-202	50	26.24	100	70-130	PCB-205	50	31.29	103	70-130	PCB-208	50	29.64	107	70-130	PCB-206	50	32.36	110	70-130	PCB-209	50	33.48	103	70-130	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 20%;">Extraction Standards</th> <th style="width: 15%;">Time</th> <th style="width: 15%;">% Rec</th> <th style="width: 15%;">Limits</th> <th style="width: 15%;"> </th> </tr> </thead> <tbody> <tr><td>13C12-PCB-001</td><td>100</td><td>8.86</td><td>87</td><td>50-150</td></tr> <tr><td>13C12-PCB-003</td><td>100</td><td>10.39</td><td>84</td><td>50-150</td></tr> <tr><td>13C12-PCB-004</td><td>100</td><td>10.55</td><td>103</td><td>50-150</td></tr> <tr><td>13C12-PCB-015</td><td>100</td><td>14.22</td><td>77</td><td>50-150</td></tr> <tr><td>13C12-PCB-019</td><td>100</td><td>12.56</td><td>137</td><td>50-150</td></tr> <tr><td>13C12-PCB-037</td><td>100</td><td>18.17</td><td>81</td><td>50-150</td></tr> <tr><td>13C12-PCB-054</td><td>100</td><td>14.41</td><td>146</td><td>50-150</td></tr> <tr><td>13C12-PCB-081</td><td>100</td><td>21.74</td><td>92</td><td>50-150</td></tr> <tr><td>13C12-PCB-077</td><td>100</td><td>22.04</td><td>87</td><td>50-150</td></tr> <tr><td>13C12-PCB-104</td><td>100</td><td>17.48</td><td>104</td><td>50-150</td></tr> <tr><td>13C12-PCB-123</td><td>100</td><td>23.04</td><td>103</td><td>50-150</td></tr> <tr><td>13C12-PCB-118</td><td>100</td><td>23.21</td><td>98</td><td>50-150</td></tr> <tr><td>13C12-PCB-114</td><td>100</td><td>23.52</td><td>101</td><td>50-150</td></tr> <tr><td>13C12-PCB-105</td><td>100</td><td>23.86</td><td>102</td><td>50-150</td></tr> <tr><td>13C12-PCB-126</td><td>100</td><td>25.44</td><td>93</td><td>50-150</td></tr> <tr><td>13C12-PCB-155</td><td>100</td><td>20.47</td><td>112</td><td>50-150</td></tr> <tr><td>13C12-PCB-167</td><td>100</td><td>26.34</td><td>100</td><td>50-150</td></tr> <tr><td>13C12-PCB-156/157</td><td>200</td><td>26.97</td><td>100</td><td>50-150</td></tr> <tr><td>13C12-PCB-169</td><td>100</td><td>28.62</td><td>95</td><td>50-150</td></tr> <tr><td>13C12-PCB-188</td><td>100</td><td>23.46</td><td>110</td><td>50-150</td></tr> <tr><td>13C12-PCB-189</td><td>100</td><td>29.89</td><td>79</td><td>50-150</td></tr> <tr><td>13C12-PCB-202</td><td>100</td><td>26.23</td><td>146</td><td>50-150</td></tr> <tr><td>13C12-PCB-205</td><td>100</td><td>31.27</td><td>112</td><td>50-150</td></tr> <tr><td>13C12-PCB-208</td><td>100</td><td>29.63</td><td>113</td><td>50-150</td></tr> <tr><td>13C12-PCB-206</td><td>100</td><td>32.33</td><td>125</td><td>50-150</td></tr> <tr><td>13C12-PCB-209</td><td>100</td><td>33.46</td><td>116</td><td>50-150</td></tr> <tr> <td colspan="5"> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 20%;">Cleanup Standards</th> <th style="width: 15%;"> </th> <th style="width: 15%;"> </th> <th style="width: 15%;"> </th> <th style="width: 15%;"> </th> </tr> </thead> <tbody> <tr><td>13C12-PCB-028</td><td>100</td><td>15.94</td><td>102</td><td>60-130</td></tr> <tr><td>13C12-PCB-111</td><td>100</td><td>21.99</td><td>100</td><td>60-130</td></tr> <tr><td>13C12-PCB-178</td><td>100</td><td>25.03</td><td>120</td><td>60-130</td></tr> </tbody> </table> </td></tr> </tbody></table>	Extraction Standards	Time	% Rec	Limits		13C12-PCB-001	100	8.86	87	50-150	13C12-PCB-003	100	10.39	84	50-150	13C12-PCB-004	100	10.55	103	50-150	13C12-PCB-015	100	14.22	77	50-150	13C12-PCB-019	100	12.56	137	50-150	13C12-PCB-037	100	18.17	81	50-150	13C12-PCB-054	100	14.41	146	50-150	13C12-PCB-081	100	21.74	92	50-150	13C12-PCB-077	100	22.04	87	50-150	13C12-PCB-104	100	17.48	104	50-150	13C12-PCB-123	100	23.04	103	50-150	13C12-PCB-118	100	23.21	98	50-150	13C12-PCB-114	100	23.52	101	50-150	13C12-PCB-105	100	23.86	102	50-150	13C12-PCB-126	100	25.44	93	50-150	13C12-PCB-155	100	20.47	112	50-150	13C12-PCB-167	100	26.34	100	50-150	13C12-PCB-156/157	200	26.97	100	50-150	13C12-PCB-169	100	28.62	95	50-150	13C12-PCB-188	100	23.46	110	50-150	13C12-PCB-189	100	29.89	79	50-150	13C12-PCB-202	100	26.23	146	50-150	13C12-PCB-205	100	31.27	112	50-150	13C12-PCB-208	100	29.63	113	50-150	13C12-PCB-206	100	32.33	125	50-150	13C12-PCB-209	100	33.46	116	50-150	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 20%;">Cleanup Standards</th> <th style="width: 15%;"> </th> <th style="width: 15%;"> </th> <th style="width: 15%;"> </th> <th style="width: 15%;"> </th> </tr> </thead> <tbody> <tr><td>13C12-PCB-028</td><td>100</td><td>15.94</td><td>102</td><td>60-130</td></tr> <tr><td>13C12-PCB-111</td><td>100</td><td>21.99</td><td>100</td><td>60-130</td></tr> <tr><td>13C12-PCB-178</td><td>100</td><td>25.03</td><td>120</td><td>60-130</td></tr> </tbody> </table>					Cleanup Standards					13C12-PCB-028	100	15.94	102	60-130	13C12-PCB-111	100	21.99	100	60-130	13C12-PCB-178	100	25.03	120	60-130
Target Analytes		Ret.	Limits			Flags																																																																																																																																																																																																																																																																																																					
	Time	% Rec																																																																																																																																																																																																																																																																																																									
PCB-001	50	8.88	103	70-130																																																																																																																																																																																																																																																																																																							
PCB-003	50	10.39	100	70-130																																																																																																																																																																																																																																																																																																							
PCB-004	50	10.56	92	70-130																																																																																																																																																																																																																																																																																																							
PCB-015	50	14.23	100	70-130																																																																																																																																																																																																																																																																																																							
PCB-019	50	12.57	96	70-130																																																																																																																																																																																																																																																																																																							
PCB-037	50	18.18	107	70-130																																																																																																																																																																																																																																																																																																							
PCB-054	50	14.42	96	70-130																																																																																																																																																																																																																																																																																																							
PCB-081	50	21.76	102	70-130																																																																																																																																																																																																																																																																																																							
PCB-077	50	22.06	98	70-130																																																																																																																																																																																																																																																																																																							
PCB-104	50	17.48	99	70-130																																																																																																																																																																																																																																																																																																							
PCB-123	50	23.05	102	70-130																																																																																																																																																																																																																																																																																																							
PCB-118	50	23.23	105	70-130																																																																																																																																																																																																																																																																																																							
PCB-114	50	23.53	101	70-130																																																																																																																																																																																																																																																																																																							
PCB-105	50	23.87	103	70-130																																																																																																																																																																																																																																																																																																							
PCB-126	50	25.45	102	70-130																																																																																																																																																																																																																																																																																																							
PCB-155	50	20.48	99	70-130																																																																																																																																																																																																																																																																																																							
PCB-167	50	26.36	99	70-130																																																																																																																																																																																																																																																																																																							
PCB-156/157	100	26.98	98	70-130																																																																																																																																																																																																																																																																																																							
PCB-169	50	28.62	99	70-130																																																																																																																																																																																																																																																																																																							
PCB-188	50	23.48	98	70-130																																																																																																																																																																																																																																																																																																							
PCB-189	50	29.90	103	70-130																																																																																																																																																																																																																																																																																																							
PCB-202	50	26.24	100	70-130																																																																																																																																																																																																																																																																																																							
PCB-205	50	31.29	103	70-130																																																																																																																																																																																																																																																																																																							
PCB-208	50	29.64	107	70-130																																																																																																																																																																																																																																																																																																							
PCB-206	50	32.36	110	70-130																																																																																																																																																																																																																																																																																																							
PCB-209	50	33.48	103	70-130																																																																																																																																																																																																																																																																																																							
<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 20%;">Extraction Standards</th> <th style="width: 15%;">Time</th> <th style="width: 15%;">% Rec</th> <th style="width: 15%;">Limits</th> <th style="width: 15%;"> </th> </tr> </thead> <tbody> <tr><td>13C12-PCB-001</td><td>100</td><td>8.86</td><td>87</td><td>50-150</td></tr> <tr><td>13C12-PCB-003</td><td>100</td><td>10.39</td><td>84</td><td>50-150</td></tr> <tr><td>13C12-PCB-004</td><td>100</td><td>10.55</td><td>103</td><td>50-150</td></tr> <tr><td>13C12-PCB-015</td><td>100</td><td>14.22</td><td>77</td><td>50-150</td></tr> <tr><td>13C12-PCB-019</td><td>100</td><td>12.56</td><td>137</td><td>50-150</td></tr> <tr><td>13C12-PCB-037</td><td>100</td><td>18.17</td><td>81</td><td>50-150</td></tr> <tr><td>13C12-PCB-054</td><td>100</td><td>14.41</td><td>146</td><td>50-150</td></tr> <tr><td>13C12-PCB-081</td><td>100</td><td>21.74</td><td>92</td><td>50-150</td></tr> <tr><td>13C12-PCB-077</td><td>100</td><td>22.04</td><td>87</td><td>50-150</td></tr> <tr><td>13C12-PCB-104</td><td>100</td><td>17.48</td><td>104</td><td>50-150</td></tr> <tr><td>13C12-PCB-123</td><td>100</td><td>23.04</td><td>103</td><td>50-150</td></tr> <tr><td>13C12-PCB-118</td><td>100</td><td>23.21</td><td>98</td><td>50-150</td></tr> <tr><td>13C12-PCB-114</td><td>100</td><td>23.52</td><td>101</td><td>50-150</td></tr> <tr><td>13C12-PCB-105</td><td>100</td><td>23.86</td><td>102</td><td>50-150</td></tr> <tr><td>13C12-PCB-126</td><td>100</td><td>25.44</td><td>93</td><td>50-150</td></tr> <tr><td>13C12-PCB-155</td><td>100</td><td>20.47</td><td>112</td><td>50-150</td></tr> <tr><td>13C12-PCB-167</td><td>100</td><td>26.34</td><td>100</td><td>50-150</td></tr> <tr><td>13C12-PCB-156/157</td><td>200</td><td>26.97</td><td>100</td><td>50-150</td></tr> <tr><td>13C12-PCB-169</td><td>100</td><td>28.62</td><td>95</td><td>50-150</td></tr> <tr><td>13C12-PCB-188</td><td>100</td><td>23.46</td><td>110</td><td>50-150</td></tr> <tr><td>13C12-PCB-189</td><td>100</td><td>29.89</td><td>79</td><td>50-150</td></tr> <tr><td>13C12-PCB-202</td><td>100</td><td>26.23</td><td>146</td><td>50-150</td></tr> <tr><td>13C12-PCB-205</td><td>100</td><td>31.27</td><td>112</td><td>50-150</td></tr> <tr><td>13C12-PCB-208</td><td>100</td><td>29.63</td><td>113</td><td>50-150</td></tr> <tr><td>13C12-PCB-206</td><td>100</td><td>32.33</td><td>125</td><td>50-150</td></tr> <tr><td>13C12-PCB-209</td><td>100</td><td>33.46</td><td>116</td><td>50-150</td></tr> <tr> <td colspan="5"> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 20%;">Cleanup Standards</th> <th style="width: 15%;"> </th> <th style="width: 15%;"> </th> <th style="width: 15%;"> </th> <th style="width: 15%;"> </th> </tr> </thead> <tbody> <tr><td>13C12-PCB-028</td><td>100</td><td>15.94</td><td>102</td><td>60-130</td></tr> <tr><td>13C12-PCB-111</td><td>100</td><td>21.99</td><td>100</td><td>60-130</td></tr> <tr><td>13C12-PCB-178</td><td>100</td><td>25.03</td><td>120</td><td>60-130</td></tr> </tbody> </table> </td></tr> </tbody></table>	Extraction Standards	Time	% Rec	Limits		13C12-PCB-001	100	8.86	87	50-150	13C12-PCB-003	100	10.39	84	50-150	13C12-PCB-004	100	10.55	103	50-150	13C12-PCB-015	100	14.22	77	50-150	13C12-PCB-019	100	12.56	137	50-150	13C12-PCB-037	100	18.17	81	50-150	13C12-PCB-054	100	14.41	146	50-150	13C12-PCB-081	100	21.74	92	50-150	13C12-PCB-077	100	22.04	87	50-150	13C12-PCB-104	100	17.48	104	50-150	13C12-PCB-123	100	23.04	103	50-150	13C12-PCB-118	100	23.21	98	50-150	13C12-PCB-114	100	23.52	101	50-150	13C12-PCB-105	100	23.86	102	50-150	13C12-PCB-126	100	25.44	93	50-150	13C12-PCB-155	100	20.47	112	50-150	13C12-PCB-167	100	26.34	100	50-150	13C12-PCB-156/157	200	26.97	100	50-150	13C12-PCB-169	100	28.62	95	50-150	13C12-PCB-188	100	23.46	110	50-150	13C12-PCB-189	100	29.89	79	50-150	13C12-PCB-202	100	26.23	146	50-150	13C12-PCB-205	100	31.27	112	50-150	13C12-PCB-208	100	29.63	113	50-150	13C12-PCB-206	100	32.33	125	50-150	13C12-PCB-209	100	33.46	116	50-150	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 20%;">Cleanup Standards</th> <th style="width: 15%;"> </th> <th style="width: 15%;"> </th> <th style="width: 15%;"> </th> <th style="width: 15%;"> </th> </tr> </thead> <tbody> <tr><td>13C12-PCB-028</td><td>100</td><td>15.94</td><td>102</td><td>60-130</td></tr> <tr><td>13C12-PCB-111</td><td>100</td><td>21.99</td><td>100</td><td>60-130</td></tr> <tr><td>13C12-PCB-178</td><td>100</td><td>25.03</td><td>120</td><td>60-130</td></tr> </tbody> </table>					Cleanup Standards					13C12-PCB-028	100	15.94	102	60-130	13C12-PCB-111	100	21.99	100	60-130	13C12-PCB-178	100	25.03	120	60-130																																																																																																																																											
Extraction Standards	Time	% Rec	Limits																																																																																																																																																																																																																																																																																																								
13C12-PCB-001	100	8.86	87	50-150																																																																																																																																																																																																																																																																																																							
13C12-PCB-003	100	10.39	84	50-150																																																																																																																																																																																																																																																																																																							
13C12-PCB-004	100	10.55	103	50-150																																																																																																																																																																																																																																																																																																							
13C12-PCB-015	100	14.22	77	50-150																																																																																																																																																																																																																																																																																																							
13C12-PCB-019	100	12.56	137	50-150																																																																																																																																																																																																																																																																																																							
13C12-PCB-037	100	18.17	81	50-150																																																																																																																																																																																																																																																																																																							
13C12-PCB-054	100	14.41	146	50-150																																																																																																																																																																																																																																																																																																							
13C12-PCB-081	100	21.74	92	50-150																																																																																																																																																																																																																																																																																																							
13C12-PCB-077	100	22.04	87	50-150																																																																																																																																																																																																																																																																																																							
13C12-PCB-104	100	17.48	104	50-150																																																																																																																																																																																																																																																																																																							
13C12-PCB-123	100	23.04	103	50-150																																																																																																																																																																																																																																																																																																							
13C12-PCB-118	100	23.21	98	50-150																																																																																																																																																																																																																																																																																																							
13C12-PCB-114	100	23.52	101	50-150																																																																																																																																																																																																																																																																																																							
13C12-PCB-105	100	23.86	102	50-150																																																																																																																																																																																																																																																																																																							
13C12-PCB-126	100	25.44	93	50-150																																																																																																																																																																																																																																																																																																							
13C12-PCB-155	100	20.47	112	50-150																																																																																																																																																																																																																																																																																																							
13C12-PCB-167	100	26.34	100	50-150																																																																																																																																																																																																																																																																																																							
13C12-PCB-156/157	200	26.97	100	50-150																																																																																																																																																																																																																																																																																																							
13C12-PCB-169	100	28.62	95	50-150																																																																																																																																																																																																																																																																																																							
13C12-PCB-188	100	23.46	110	50-150																																																																																																																																																																																																																																																																																																							
13C12-PCB-189	100	29.89	79	50-150																																																																																																																																																																																																																																																																																																							
13C12-PCB-202	100	26.23	146	50-150																																																																																																																																																																																																																																																																																																							
13C12-PCB-205	100	31.27	112	50-150																																																																																																																																																																																																																																																																																																							
13C12-PCB-208	100	29.63	113	50-150																																																																																																																																																																																																																																																																																																							
13C12-PCB-206	100	32.33	125	50-150																																																																																																																																																																																																																																																																																																							
13C12-PCB-209	100	33.46	116	50-150																																																																																																																																																																																																																																																																																																							
<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 20%;">Cleanup Standards</th> <th style="width: 15%;"> </th> <th style="width: 15%;"> </th> <th style="width: 15%;"> </th> <th style="width: 15%;"> </th> </tr> </thead> <tbody> <tr><td>13C12-PCB-028</td><td>100</td><td>15.94</td><td>102</td><td>60-130</td></tr> <tr><td>13C12-PCB-111</td><td>100</td><td>21.99</td><td>100</td><td>60-130</td></tr> <tr><td>13C12-PCB-178</td><td>100</td><td>25.03</td><td>120</td><td>60-130</td></tr> </tbody> </table>					Cleanup Standards					13C12-PCB-028	100	15.94	102	60-130	13C12-PCB-111	100	21.99	100	60-130	13C12-PCB-178	100	25.03	120	60-130																																																																																																																																																																																																																																																																																			
Cleanup Standards																																																																																																																																																																																																																																																																																																											
13C12-PCB-028	100	15.94	102	60-130																																																																																																																																																																																																																																																																																																							
13C12-PCB-111	100	21.99	100	60-130																																																																																																																																																																																																																																																																																																							
13C12-PCB-178	100	25.03	120	60-130																																																																																																																																																																																																																																																																																																							



1435 Norjohn Court, Unit 1, Burlington, ON, Canada L7L 0E6

## SVOC DATA PACKAGE

### SECTION 5: QC SAMPLE DATA

Including:

- Laboratory Method Blank Analysis Reports
- Laboratory Control Sample Analysis Reports
- Matrix Spike Analysis Reports
- Other QC Sample Analysis Reports (where applicable)

ALS Life sciences								
Laboratory Method Blank Analysis Report								
Sample Name	Method Blank		Sampling Date	n/a				
ALS Sample ID	WG2225462-1		Extraction Date	3-Dec-15				
Analysis Method	EPA 1668A		Sample Size	1	L			
Analysis Type	Blank		Percent Moisture	n/a				
Sample Matrix	OC		Split Ratio	1				
Run Information	Run 1							
Filename	5-151207C23							
Run Date	08-Dec-15 05:40							
Final Volume	25 uL							
Dilution Factor	1							
Analysis Units	pg/L							
Instrument - Column	HRMS5 SPB OCTYL56284-02B							
Target Analytes	TEF (WHO 2005)	Ret. Time	Conc. pg/L	EDL pg/L	EMPC Flags	pg/L	LQL	
PCB-001	8.86	1.52	0.40	J	25			
PCB-002	10.39	<1.3	0.43	J.R.	1.3	25		
PCB-003	NoFind	<0.47	0.47	U		25		
PCB-004	NoFind	<2.6	2.6	U		25		
PCB-010	NoFind	<1.8	1.8	U		25		
PCB-009	NoFind	<2.2	2.2	U		25		
PCB-007	11.94	<8.8	1.9	J.R.	8.8	25		
PCB-006	NoFind	<1.9	1.9	U		25		
PCB-005	12.37	<6.1	2.3	J.R.	6.1	25		
PCB-008	NoFind	<1.7	1.7	U		25		
PCB-014	NoFind	<2.2	2.2	U		25		
PCB-011	13.87	19.0	2.3	J		25		
PCB-012/013	NoFind	<2.1	2.1	U		25		
PCB-015	NoFind	<2.4	2.4	U		25		
PCB-019	NoFind	<0.89	0.89	U		25		
PCB-018/030	13.68	<1.3	0.53	J.R.	1.3	25		
PCB-017	13.94	0.970	0.64	J		25		
PCB-027	NoFind	<0.44	0.44	U		25		
PCB-024	NoFind	<0.44	0.44	U		25		
PCB-016	NoFind	<0.64	0.64	U		25		
PCB-032	14.51	<0.39	0.39	U		25		
PCB-034	NoFind	<0.70	0.70	U		25		
PCB-023	NoFind	<0.58	0.58	U		25		
PCB-026/029	NoFind	<0.73	0.73	U		25		
PCB-025	NoFind	<0.54	0.54	U		25		
PCB-031	15.79	<1.5	0.62	J.R.	1.5	25		
PCB-020/028	15.96	<1.4	0.66	J.R.	1.4	25		
PCB-021/033	16.09	0.980	0.56	J		25		
PCB-022	NoFind	<0.65	0.65	U		25		
PCB-036	NoFind	<0.58	0.58	U		25		
PCB-039	NoFind	<0.66	0.66	U		25		
PCB-038	NoFind	<0.61	0.61	U		25		
PCB-035	NoFind	<0.66	0.66	U		25		
PCB-037	18.17	<0.70	0.70	U	0.28	25		
PCB-054	NoFind	<0.44	0.44	U		25		
PCB-050/053	NoFind	<0.61	0.61	U		25		
PCB-045/051	NoFind	<0.65	0.65	U		25		
PCB-046	NoFind	<0.74	0.74	U		25		
PCB-052	16.96	1.71	0.68	J		25		
PCB-073	NoFind	<0.47	0.47	U		25		
PCB-043	NoFind	<0.71	0.71	U		25		
PCB-049/069	NoFind	<0.51	0.51	U		25		
PCB-048	NoFind	<0.63	0.63	U		25		
PCB-044/047/065	17.52	1.90	0.54	J		25		
PCB-059/062/075	NoFind	<0.45	0.45	U		25		
PCB-042	NoFind	<0.60	0.60	U		25		
PCB-040/041/071	NoFind	<0.65	0.65	U		25		
PCB-064	NoFind	<0.41	0.41	U		25		
PCB-072	NoFind	<0.62	0.62	U		25		
PCB-068	NoFind	<0.48	0.48	U		25		
PCB-057	NoFind	<0.61	0.61	U		25		
PCB-058	NoFind	<0.64	0.64	U		25		
PCB-067	NoFind	<0.46	0.46	U		25		
PCB-063	NoFind	<0.55	0.55	U		25		
PCB-061/070/074/076	19.58	<0.56	0.56	U	0.55	25		
PCB-066	NoFind	<0.57	0.57	U		25		
PCB-055	NoFind	<0.55	0.55	U		25		
PCB-056	NoFind	<0.58	0.58	U		25		
PCB-060	NoFind	<0.56	0.56	U		25		
PCB-080	NoFind	<0.50	0.50	U		25		
PCB-079	NoFind	<0.50	0.50	U		25		
PCB-078	NoFind	<0.55	0.55	U		25		
PCB-081	0.0003	NoFind	<0.52	0.52	U		25	
PCB-077	0.0001	NoFind	<0.53	0.53	U		25	
PCB-104	NoFind	<0.18	0.18	U		25		
PCB-096	NoFind	<0.17	0.17	U		25		
PCB-103	NoFind	<0.31	0.31	U		25		
PCB-094	NoFind	<0.33	0.33	U		25		
PCB-095	NoFind	<0.36	0.36	U		25		
PCB-093/098/100/102	NoFind	<0.30	0.30	U		25		

ALS Life sciences								
Laboratory Method Blank Analysis Report								
Sample Name	Method Blank		Sampling Date	n/a				
ALS Sample ID	WG2225462-1		Extraction Date	3-Dec-15				
Analysis Method	EPA 1668A		Sample Size	1	L			
Analysis Type	Blank		Percent Moisture	n/a				
Sample Matrix	OC		Split Ratio	1				
<b>Run Information</b>	<b>Run 1</b>							
Filename	5-151207C23							
Run Date	08-Dec-15 05:40							
Final Volume	25 uL							
Dilution Factor	1							
Analysis Units	pg/L							
Instrument - Column	HRMS5 SPB OCTYL56284-02B							
<b>Target Analytes</b>	<b>TEF (WHO 2005)</b>	<b>Ret. Time</b>	<b>Conc. pg/L</b>	<b>EDL pg/L Flags</b>	<b>EMPC pg/L</b>	<b>LQL</b>		
PCB-088/091		No/Find	<0.33	0.33	U	25		
PCB-084		No/Find	<0.37	0.37	U	25		
PCB-089		No/Find	<0.34	0.34	U	25		
PCB-121		No/Find	<0.21	0.21	U	25		
PCB-092		No/Find	<0.33	0.33	U	25		
PCB-090/101/113	20.61	<0.69	0.26	J.R.	0.69	25		
PCB-083/099	20.94	<0.74	0.32	J.R.	0.74	25		
PCB-112		No/Find	<0.21	0.21	U	25		
CB-086/087/097/108/119/125		No/Find	<0.25	0.25	U	25		
PCB-085/110/115/116/117	21.69	0.760	0.23	J	25			
PCB-082		No/Find	<0.46	0.46	U	25		
PCB-111		No/Find	<0.21	0.21	U	25		
PCB-120		No/Find	<0.20	0.20	U	25		
PCB-107/124		No/Find	<0.31	0.31	U	25		
PCB-109		No/Find	<0.31	0.31	U	25		
PCB-123	0.00003	No/Find	<0.35	0.35	U	25		
PCB-106		No/Find	<0.28	0.28	U	25		
PCB-118	0.00003	23.23	<0.68	0.32	J.R.	0.68	25	
PCB-122		No/Find	<0.34	0.34	U	25		
PCB-114	0.00003	No/Find	<0.32	0.32	U	25		
PCB-105	0.00003	23.87	<0.45	0.33	J.R.	0.45	25	
PCB-127		No/Find	<0.29	0.29	U	25		
PCB-126	0.1	No/Find	<0.30	0.30	U	25		
PCB-155		No/Find	<0.12	0.12	U	25		
PCB-152		No/Find	<0.14	0.14	U	25		
PCB-150		No/Find	<0.11	0.11	U	25		
PCB-136		No/Find	<0.13	0.13	U	25		
PCB-145		No/Find	<0.13	0.13	U	25		
PCB-148		No/Find	<0.17	0.17	U	25		
PCB-135/151		No/Find	<0.17	0.17	U	25		
PCB-154		No/Find	<0.13	0.13	U	25		
PCB-144		No/Find	<0.17	0.17	U	25		
PCB-147/149	22.64	0.440	0.22	J	25			
PCB-134/143		No/Find	<0.25	0.25	U	25		
PCB-139/140		No/Find	<0.22	0.22	U	25		
PCB-131		No/Find	<0.24	0.24	U	25		
PCB-142		No/Find	<0.23	0.23	U	25		
PCB-132		No/Find	<0.24	0.24	U	25		
PCB-133		No/Find	<0.24	0.24	U	25		
PCB-165		No/Find	<0.18	0.18	U	25		
PCB-146		No/Find	<0.20	0.20	U	25		
PCB-161		No/Find	<0.17	0.17	U	25		
PCB-153/168	24.16	<1.1	0.17	J.R.	1.1	25		
PCB-141		No/Find	<0.22	0.22	U	25		
PCB-130		No/Find	<0.26	0.26	U	25		
PCB-137/164		No/Find	<0.24	0.24	U	25		
PCB-129/138/163	24.84	<0.75	0.21	J.R.	0.75	25		
PCB-160		No/Find	<0.15	0.15	U	25		
PCB-158		No/Find	<0.14	0.14	U	25		
PCB-128/166		No/Find	<0.18	0.18	U	25		
PCB-159		No/Find	<0.15	0.15	U	25		
PCB-162		No/Find	<0.14	0.14	U	25		
PCB-167	0.00003	No/Find	<0.15	0.15	U	25		
PCB-156/157	0.00003	No/Find	<0.20	0.20	U	50		
PCB-169	0.03	No/Find	<0.16	0.16	U	25		
PCB-188		No/Find	<0.13	0.13	U	25		
PCB-179		No/Find	<0.16	0.16	U	25		
PCB-184		No/Find	<0.13	0.13	U	25		
PCB-176		No/Find	<0.15	0.15	U	25		
PCB-186		No/Find	<0.15	0.15	U	25		
PCB-178		No/Find	<0.20	0.20	U	25		
PCB-175		No/Find	<0.18	0.18	U	25		
PCB-187	25.50	<0.27	0.16	J.R.	0.27	25		
PCB-182		No/Find	<0.17	0.17	U	25		
PCB-183		No/Find	<0.19	0.19	U	25		
PCB-185		No/Find	<0.18	0.18	U	25		
PCB-174		No/Find	<0.19	0.19	U	25		
PCB-177		No/Find	<0.20	0.20	U	25		
PCB-181		No/Find	<0.18	0.18	U	25		
PCB-171/173		No/Find	<0.20	0.20	U	25		
PCB-172		No/Find	<0.19	0.19	U	25		

ALS Life sciences							
Laboratory Method Blank Analysis Report							
Sample Name	Method Blank			Sampling Date	n/a		
ALS Sample ID	WG2225462-1			Extraction Date	3-Dec-15		
Analysis Method	EPA 1668A			Sample Size	1	L	
Analysis Type	Blank			Percent Moisture	n/a		
Sample Matrix	OC			Split Ratio	1		
<b>Run Information</b>							
Filename	5-151207C23						
Run Date	08-Dec-15 05:40						
Final Volume	25 uL						
Dilution Factor	1						
Analysis Units	pg/L						
Instrument - Column	HRMS5 SPB OCTYL56284-02B						
<b>Target Analytes</b>							
TEF (WHO 2005)		Ret.	Conc.	EDL	EMPC		
		Time	pg/L	pg/L	Flags	pg/L	LQL
PCB-192							
PCB-180/193	NoFind	<0.15	0.15	U	25		
PCB-191	NoFind	<0.14	0.14	U	25		
PCB-170	NoFind	<0.19	0.19	U	25		
PCB-190	NoFind	<0.13	0.13	U	25		
PCB-189	0.00003	NoFind	<0.17	0.17	U	25	
PCB-202	NoFind	<0.13	0.13	U	25		
PCB-201	NoFind	<0.13	0.13	U	25		
PCB-204	NoFind	<0.12	0.12	U	25		
PCB-197	NoFind	<0.12	0.12	U	25		
PCB-200	NoFind	<0.12	0.12	U	25		
PCB-198/199	NoFind	<0.17	0.17	U	25		
PCB-196	NoFind	<0.17	0.17	U	25		
PCB-203	NoFind	<0.16	0.16	U	25		
PCB-195	NoFind	<0.18	0.18	U	25		
PCB-194	31.01	<0.47	0.18	J.R. 0.47	25		
PCB-205	NoFind	<0.18	0.18	U	25		
PCB-208	NoFind	<0.60	0.60	U	25		
PCB-207	NoFind	<0.60	0.60	U	25		
PCB-206	NoFind	<1.2	1.2	U	25		
PCB-209	33.46	<1.1	0.21	J.R. 1.1	25		
<b>Extraction Standards</b>							
pg	Time	% Rec	Limits				
13C12-PCB-001	2000	8.86	30	25-150			
13C12-PCB-003	2000	10.39	30	25-150			
13C12-PCB-004	2000	10.56	36	25-150			
13C12-PCB-015	2000	14.23	37	25-150			
13C12-PCB-019	2000	12.56	41	25-150			
13C12-PCB-037	2000	18.17	60	25-150			
13C12-PCB-054	2000	14.42	48	25-150			
13C12-PCB-081	2000	21.75	68	25-150			
13C12-PCB-077	2000	22.04	65	25-150			
13C12-PCB-104	2000	17.48	65	25-150			
13C12-PCB-123	2000	23.04	72	25-150			
13C12-PCB-118	2000	23.21	73	25-150			
13C12-PCB-114	2000	23.52	72	25-150			
13C12-PCB-105	2000	23.86	73	25-150			
13C12-PCB-126	2000	25.44	80	25-150			
13C12-PCB-155	2000	20.47	78	25-150			
13C12-PCB-167	2000	26.34	73	25-150			
13C12-PCB-156/157	4000	26.97	76	25-150			
13C12-PCB-169	2000	28.61	79	25-150			
13C12-PCB-188	2000	23.46	75	25-150			
13C12-PCB-189	2000	29.89	64	25-150			
13C12-PCB-202	2000	26.23	94	25-150			
13C12-PCB-205	2000	31.26	69	25-150			
13C12-PCB-208	2000	29.63	78	25-150			
13C12-PCB-206	2000	32.33	74	25-150			
13C12-PCB-209	2000	33.45	64	25-150			
<b>Cleanup Standards</b>							
13C12-PCB-028	2000	15.94	58	30-135			
13C12-PCB-111	2000	21.99	83	30-135			
13C12-PCB-178	2000	25.03	95	30-135			
<b>Homologue Group Totals</b>							
Total MonoCB	2.82	0.40	J	25			
Total DiCB	33.9	1.7	J	25			
Total TriCB	6.15	0.39	J	25			
Total TetraCB	3.61	0.41	J	25			
Total PentaCB	3.32	0.17	J	25			
Total HexaCB	2.29	0.11	J	25			
Total HeptaCB	0.840	0.13	J	25			
Total OctaCB	0.470	0.12	J	25			
Total NonaCB	<0.60	0.60	U	25			
DecaCB	1.10	0.21	J	25			
Total PCB	54.5		J				
<b>Toxic Equivalency - (WHO 2005)</b>							
Mid Point PCB TEQ		0.0176					
<b>Toxic Equivalency - (WHO 1998)</b>							
Mid Point PCB TEQ		0.0161					
<b>EDL</b> Indicates the Estimated Detection Limit, based on the measured background noise for this target in this sample. <b>TEF</b> Indicates the Toxic Equivalency Factor <b>LQL</b> Indicates the Lower Quantification Limit, based on the lower limit of the calibrated range  <b>U</b> Indicates that this compound was not detected above the EDL. <b>J</b> indicates that the analyte was positively identified. The associated numerical result is an estimate. <b>R</b> Indicates that the ion abundance ratio for this analyte did not meet the control limit. The reported value represents an estimated concentration.  <b>EMPC</b> Estimated Maximum Possible Concentration							
Approved: <i>E. Sabljic</i> --e-signature-- 11-Dec-2015							

# ALS Life sciences

## Laboratory Control Sample Analysis Report

<b>Sample Name</b>	<b>Laboratory Control Sample</b>			Sampling Date	n/a	Approved: <i>E. Sabljic</i> -e-signature-- 11-Dec-2015																																																																																																																																																																																																																																																																																																																																																																		
ALS Sample ID	WG2225462-2	Extraction Date	3-Dec-15	Sample Size	1																																																																																																																																																																																																																																																																																																																																																																			
Analysis Method	EPA 1668A	Percent Moisture	n/a	Split Ratio	1																																																																																																																																																																																																																																																																																																																																																																			
Analysis Type	LCS																																																																																																																																																																																																																																																																																																																																																																							
Sample Matrix	QC																																																																																																																																																																																																																																																																																																																																																																							
<b>Run Information</b>		<b>Run 1</b>																																																																																																																																																																																																																																																																																																																																																																						
Filename	5-151207C19																																																																																																																																																																																																																																																																																																																																																																							
Run Date	08-Dec-15 03:02																																																																																																																																																																																																																																																																																																																																																																							
Final Volume	25 uL																																																																																																																																																																																																																																																																																																																																																																							
Dilution Factor	1																																																																																																																																																																																																																																																																																																																																																																							
Analysis Units	% Rec																																																																																																																																																																																																																																																																																																																																																																							
Instrument - Column	HRMS5 SPBOCTYL56284-02B																																																																																																																																																																																																																																																																																																																																																																							
<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2" style="text-align: left; width: 15%;">Target Analytes</th> <th style="text-align: center; width: 15%;">Ret.</th> <th colspan="3" style="text-align: center;">Limits</th> <th rowspan="2" style="text-align: center; width: 15%;">Flags</th> </tr> <tr> <th style="text-align: center;">Time</th> <th style="text-align: center;">% Rec</th> <th style="text-align: center;"></th> <th style="text-align: center;"></th> </tr> </thead> <tbody> <tr> <td>PCB-001</td><td style="text-align: center;">1000</td><td style="text-align: center;">8.86</td><td style="text-align: center;">114</td><td style="text-align: center;">50-150</td><td></td></tr> <tr> <td>PCB-003</td><td style="text-align: center;">1000</td><td style="text-align: center;">10.39</td><td style="text-align: center;">106</td><td style="text-align: center;">50-150</td><td></td></tr> <tr> <td>PCB-004</td><td style="text-align: center;">1000</td><td style="text-align: center;">10.56</td><td style="text-align: center;">103</td><td style="text-align: center;">50-150</td><td></td></tr> <tr> <td>PCB-015</td><td style="text-align: center;">1000</td><td style="text-align: center;">14.23</td><td style="text-align: center;">100</td><td style="text-align: center;">50-150</td><td></td></tr> <tr> <td>PCB-019</td><td style="text-align: center;">1000</td><td style="text-align: center;">12.57</td><td style="text-align: center;">108</td><td style="text-align: center;">50-150</td><td></td></tr> <tr> <td>PCB-037</td><td style="text-align: center;">1000</td><td style="text-align: center;">18.17</td><td style="text-align: center;">94</td><td style="text-align: center;">50-150</td><td></td></tr> <tr> <td>PCB-054</td><td style="text-align: center;">1000</td><td style="text-align: center;">14.42</td><td style="text-align: center;">106</td><td style="text-align: center;">50-150</td><td></td></tr> <tr> <td>PCB-081</td><td style="text-align: center;">1000</td><td style="text-align: center;">21.75</td><td style="text-align: center;">107</td><td style="text-align: center;">50-150</td><td></td></tr> <tr> <td>PCB-077</td><td style="text-align: center;">1000</td><td style="text-align: center;">22.05</td><td style="text-align: center;">101</td><td style="text-align: center;">50-150</td><td></td></tr> <tr> <td>PCB-104</td><td style="text-align: center;">1000</td><td style="text-align: center;">17.48</td><td style="text-align: center;">102</td><td style="text-align: center;">50-150</td><td></td></tr> <tr> <td>PCB-123</td><td style="text-align: center;">1000</td><td style="text-align: center;">23.05</td><td style="text-align: center;">114</td><td style="text-align: center;">50-150</td><td></td></tr> <tr> <td>PCB-118</td><td style="text-align: center;">1000</td><td style="text-align: center;">23.23</td><td style="text-align: center;">113</td><td style="text-align: center;">50-150</td><td></td></tr> <tr> <td>PCB-114</td><td style="text-align: center;">1000</td><td style="text-align: center;">23.52</td><td style="text-align: center;">112</td><td style="text-align: center;">50-150</td><td></td></tr> <tr> <td>PCB-105</td><td style="text-align: center;">1000</td><td style="text-align: center;">23.86</td><td style="text-align: center;">111</td><td style="text-align: center;">50-150</td><td></td></tr> <tr> <td>PCB-126</td><td style="text-align: center;">1000</td><td style="text-align: center;">25.45</td><td style="text-align: center;">109</td><td style="text-align: center;">50-150</td><td></td></tr> <tr> <td>PCB-155</td><td style="text-align: center;">1000</td><td style="text-align: center;">20.48</td><td style="text-align: center;">105</td><td style="text-align: center;">50-150</td><td></td></tr> <tr> <td>PCB-167</td><td style="text-align: center;">1000</td><td style="text-align: center;">26.35</td><td style="text-align: center;">106</td><td style="text-align: center;">50-150</td><td></td></tr> <tr> <td>PCB-156/157</td><td style="text-align: center;">2000</td><td style="text-align: center;">26.98</td><td style="text-align: center;">105</td><td style="text-align: center;">50-150</td><td></td></tr> <tr> <td>PCB-169</td><td style="text-align: center;">1000</td><td style="text-align: center;">28.62</td><td style="text-align: center;">105</td><td style="text-align: center;">50-150</td><td></td></tr> <tr> <td>PCB-188</td><td style="text-align: center;">1000</td><td style="text-align: center;">23.47</td><td style="text-align: center;">106</td><td style="text-align: center;">50-150</td><td></td></tr> <tr> <td>PCB-189</td><td style="text-align: center;">1000</td><td style="text-align: center;">29.90</td><td style="text-align: center;">116</td><td style="text-align: center;">50-150</td><td></td></tr> <tr> <td>PCB-202</td><td style="text-align: center;">1000</td><td style="text-align: center;">26.24</td><td style="text-align: center;">111</td><td style="text-align: center;">50-150</td><td></td></tr> <tr> <td>PCB-205</td><td style="text-align: center;">1000</td><td style="text-align: center;">31.27</td><td style="text-align: center;">114</td><td style="text-align: center;">50-150</td><td></td></tr> <tr> <td>PCB-208</td><td style="text-align: center;">1000</td><td style="text-align: center;">29.64</td><td style="text-align: center;">112</td><td style="text-align: center;">50-150</td><td></td></tr> <tr> <td>PCB-206</td><td style="text-align: center;">1000</td><td style="text-align: center;">32.34</td><td style="text-align: center;">128</td><td style="text-align: center;">50-150</td><td></td></tr> <tr> <td>PCB-209</td><td style="text-align: center;">1000</td><td style="text-align: center;">33.48</td><td style="text-align: center;">119</td><td style="text-align: center;">50-150</td><td></td></tr> <tr> <td> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Extraction Standards</th> <th style="text-align: center;">Time</th> <th style="text-align: center;">% Rec</th> <th colspan="3" style="text-align: center;">Limits</th> </tr> </thead> <tbody> <tr> <td>13C12-PCB-001</td><td style="text-align: center;">2000</td><td style="text-align: center;">8.85</td><td style="text-align: center;">28</td><td style="text-align: center;">30-140</td><td></td></tr> <tr> <td>13C12-PCB-003</td><td style="text-align: center;">2000</td><td style="text-align: center;">10.38</td><td style="text-align: center;">29</td><td style="text-align: center;">30-140</td><td></td></tr> <tr> <td>13C12-PCB-004</td><td style="text-align: center;">2000</td><td style="text-align: center;">10.55</td><td style="text-align: center;">35</td><td style="text-align: center;">30-140</td><td></td></tr> <tr> <td>13C12-PCB-015</td><td style="text-align: center;">2000</td><td style="text-align: center;">14.22</td><td style="text-align: center;">33</td><td style="text-align: center;">30-140</td><td></td></tr> <tr> <td>13C12-PCB-019</td><td style="text-align: center;">2000</td><td style="text-align: center;">12.56</td><td style="text-align: center;">44</td><td style="text-align: center;">30-140</td><td></td></tr> <tr> <td>13C12-PCB-037</td><td style="text-align: center;">2000</td><td style="text-align: center;">18.16</td><td style="text-align: center;">57</td><td style="text-align: center;">30-140</td><td></td></tr> <tr> <td>13C12-PCB-054</td><td style="text-align: center;">2000</td><td style="text-align: center;">14.41</td><td style="text-align: center;">46</td><td style="text-align: center;">30-140</td><td></td></tr> <tr> <td>13C12-PCB-081</td><td style="text-align: center;">2000</td><td style="text-align: center;">21.74</td><td style="text-align: center;">67</td><td style="text-align: center;">30-140</td><td></td></tr> <tr> <td>13C12-PCB-077</td><td style="text-align: center;">2000</td><td style="text-align: center;">22.04</td><td style="text-align: center;">65</td><td style="text-align: center;">30-140</td><td></td></tr> <tr> <td>13C12-PCB-104</td><td style="text-align: center;">2000</td><td style="text-align: center;">17.48</td><td style="text-align: center;">71</td><td style="text-align: center;">30-140</td><td></td></tr> <tr> <td>13C12-PCB-123</td><td style="text-align: center;">2000</td><td style="text-align: center;">23.04</td><td style="text-align: center;">74</td><td style="text-align: center;">30-140</td><td></td></tr> <tr> <td>13C12-PCB-118</td><td style="text-align: center;">2000</td><td style="text-align: center;">23.21</td><td style="text-align: center;">72</td><td style="text-align: center;">30-140</td><td></td></tr> <tr> <td>13C12-PCB-114</td><td style="text-align: center;">2000</td><td style="text-align: center;">23.50</td><td style="text-align: center;">74</td><td style="text-align: center;">30-140</td><td></td></tr> <tr> <td>13C12-PCB-105</td><td style="text-align: center;">2000</td><td style="text-align: center;">23.85</td><td style="text-align: center;">75</td><td style="text-align: center;">30-140</td><td></td></tr> <tr> <td>13C12-PCB-126</td><td style="text-align: center;">2000</td><td style="text-align: center;">25.44</td><td style="text-align: center;">84</td><td style="text-align: center;">30-140</td><td></td></tr> <tr> <td>13C12-PCB-155</td><td style="text-align: center;">2000</td><td style="text-align: center;">20.47</td><td style="text-align: center;">82</td><td style="text-align: center;">30-140</td><td></td></tr> <tr> <td>13C12-PCB-167</td><td style="text-align: center;">2000</td><td style="text-align: center;">26.34</td><td style="text-align: center;">78</td><td style="text-align: center;">30-140</td><td></td></tr> <tr> <td>13C12-PCB-156/157</td><td style="text-align: center;">4000</td><td style="text-align: center;">26.97</td><td style="text-align: center;">82</td><td style="text-align: center;">30-140</td><td></td></tr> <tr> <td>13C12-PCB-169</td><td style="text-align: center;">2000</td><td style="text-align: center;">28.61</td><td style="text-align: center;">85</td><td style="text-align: center;">30-140</td><td></td></tr> <tr> <td>13C12-PCB-188</td><td style="text-align: center;">2000</td><td style="text-align: center;">23.46</td><td style="text-align: center;">79</td><td style="text-align: center;">30-140</td><td></td></tr> <tr> <td>13C12-PCB-189</td><td style="text-align: center;">2000</td><td style="text-align: center;">29.89</td><td style="text-align: center;">70</td><td style="text-align: center;">30-140</td><td></td></tr> <tr> <td>13C12-PCB-202</td><td style="text-align: center;">2000</td><td style="text-align: center;">26.23</td><td style="text-align: center;">102</td><td style="text-align: center;">30-140</td><td></td></tr> <tr> <td>13C12-PCB-205</td><td style="text-align: center;">2000</td><td style="text-align: center;">31.26</td><td style="text-align: center;">78</td><td style="text-align: center;">30-140</td><td></td></tr> <tr> <td>13C12-PCB-208</td><td style="text-align: center;">2000</td><td style="text-align: center;">29.63</td><td style="text-align: center;">88</td><td style="text-align: center;">30-140</td><td></td></tr> <tr> <td>13C12-PCB-206</td><td style="text-align: center;">2000</td><td style="text-align: center;">32.33</td><td style="text-align: center;">87</td><td style="text-align: center;">30-140</td><td></td></tr> <tr> <td>13C12-PCB-209</td><td style="text-align: center;">2000</td><td style="text-align: center;">33.46</td><td style="text-align: center;">79</td><td style="text-align: center;">30-140</td><td></td></tr> <tr> <td colspan="7"> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Cleanup Standards</th> <th style="text-align: center;">Time</th> <th style="text-align: center;">% Rec</th> <th colspan="3" style="text-align: center;">Limits</th> </tr> </thead> <tbody> <tr> <td>13C12-PCB-028</td><td style="text-align: center;">2000</td><td style="text-align: center;">15.93</td><td style="text-align: center;">53</td><td style="text-align: center;">40-125</td><td></td></tr> <tr> <td>13C12-PCB-111</td><td style="text-align: center;">2000</td><td style="text-align: center;">21.98</td><td style="text-align: center;">80</td><td style="text-align: center;">40-125</td><td></td></tr> <tr> <td>13C12-PCB-178</td><td style="text-align: center;">2000</td><td style="text-align: center;">25.02</td><td style="text-align: center;">95</td><td style="text-align: center;">40-125</td><td></td></tr> </tbody> </table> </td></tr> </tbody></table> </td></tr></tbody></table>	Target Analytes	Ret.	Limits			Flags	Time	% Rec			PCB-001	1000	8.86	114	50-150		PCB-003	1000	10.39	106	50-150		PCB-004	1000	10.56	103	50-150		PCB-015	1000	14.23	100	50-150		PCB-019	1000	12.57	108	50-150		PCB-037	1000	18.17	94	50-150		PCB-054	1000	14.42	106	50-150		PCB-081	1000	21.75	107	50-150		PCB-077	1000	22.05	101	50-150		PCB-104	1000	17.48	102	50-150		PCB-123	1000	23.05	114	50-150		PCB-118	1000	23.23	113	50-150		PCB-114	1000	23.52	112	50-150		PCB-105	1000	23.86	111	50-150		PCB-126	1000	25.45	109	50-150		PCB-155	1000	20.48	105	50-150		PCB-167	1000	26.35	106	50-150		PCB-156/157	2000	26.98	105	50-150		PCB-169	1000	28.62	105	50-150		PCB-188	1000	23.47	106	50-150		PCB-189	1000	29.90	116	50-150		PCB-202	1000	26.24	111	50-150		PCB-205	1000	31.27	114	50-150		PCB-208	1000	29.64	112	50-150		PCB-206	1000	32.34	128	50-150		PCB-209	1000	33.48	119	50-150		<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Extraction Standards</th> <th style="text-align: center;">Time</th> <th style="text-align: center;">% Rec</th> <th colspan="3" style="text-align: center;">Limits</th> </tr> </thead> <tbody> <tr> <td>13C12-PCB-001</td><td style="text-align: center;">2000</td><td style="text-align: center;">8.85</td><td style="text-align: center;">28</td><td style="text-align: center;">30-140</td><td></td></tr> <tr> <td>13C12-PCB-003</td><td style="text-align: center;">2000</td><td style="text-align: center;">10.38</td><td style="text-align: center;">29</td><td style="text-align: center;">30-140</td><td></td></tr> <tr> <td>13C12-PCB-004</td><td style="text-align: center;">2000</td><td style="text-align: center;">10.55</td><td style="text-align: center;">35</td><td style="text-align: center;">30-140</td><td></td></tr> <tr> <td>13C12-PCB-015</td><td style="text-align: center;">2000</td><td style="text-align: center;">14.22</td><td style="text-align: center;">33</td><td style="text-align: center;">30-140</td><td></td></tr> <tr> <td>13C12-PCB-019</td><td style="text-align: center;">2000</td><td style="text-align: center;">12.56</td><td style="text-align: center;">44</td><td style="text-align: center;">30-140</td><td></td></tr> <tr> <td>13C12-PCB-037</td><td style="text-align: center;">2000</td><td style="text-align: center;">18.16</td><td style="text-align: center;">57</td><td style="text-align: center;">30-140</td><td></td></tr> <tr> <td>13C12-PCB-054</td><td style="text-align: center;">2000</td><td style="text-align: center;">14.41</td><td style="text-align: center;">46</td><td style="text-align: center;">30-140</td><td></td></tr> <tr> <td>13C12-PCB-081</td><td style="text-align: center;">2000</td><td style="text-align: center;">21.74</td><td style="text-align: center;">67</td><td style="text-align: center;">30-140</td><td></td></tr> <tr> <td>13C12-PCB-077</td><td style="text-align: center;">2000</td><td style="text-align: center;">22.04</td><td style="text-align: center;">65</td><td style="text-align: center;">30-140</td><td></td></tr> <tr> <td>13C12-PCB-104</td><td style="text-align: center;">2000</td><td style="text-align: center;">17.48</td><td style="text-align: center;">71</td><td style="text-align: center;">30-140</td><td></td></tr> <tr> <td>13C12-PCB-123</td><td style="text-align: center;">2000</td><td style="text-align: center;">23.04</td><td style="text-align: center;">74</td><td style="text-align: center;">30-140</td><td></td></tr> <tr> <td>13C12-PCB-118</td><td style="text-align: center;">2000</td><td style="text-align: center;">23.21</td><td style="text-align: center;">72</td><td style="text-align: center;">30-140</td><td></td></tr> <tr> <td>13C12-PCB-114</td><td style="text-align: center;">2000</td><td style="text-align: center;">23.50</td><td style="text-align: center;">74</td><td style="text-align: center;">30-140</td><td></td></tr> <tr> <td>13C12-PCB-105</td><td style="text-align: center;">2000</td><td style="text-align: center;">23.85</td><td style="text-align: center;">75</td><td style="text-align: center;">30-140</td><td></td></tr> <tr> <td>13C12-PCB-126</td><td style="text-align: center;">2000</td><td style="text-align: center;">25.44</td><td style="text-align: center;">84</td><td style="text-align: center;">30-140</td><td></td></tr> <tr> <td>13C12-PCB-155</td><td style="text-align: center;">2000</td><td style="text-align: center;">20.47</td><td style="text-align: center;">82</td><td style="text-align: center;">30-140</td><td></td></tr> <tr> <td>13C12-PCB-167</td><td style="text-align: center;">2000</td><td style="text-align: center;">26.34</td><td style="text-align: center;">78</td><td style="text-align: center;">30-140</td><td></td></tr> <tr> <td>13C12-PCB-156/157</td><td style="text-align: center;">4000</td><td style="text-align: center;">26.97</td><td style="text-align: center;">82</td><td style="text-align: center;">30-140</td><td></td></tr> <tr> <td>13C12-PCB-169</td><td style="text-align: center;">2000</td><td style="text-align: center;">28.61</td><td style="text-align: center;">85</td><td style="text-align: center;">30-140</td><td></td></tr> <tr> <td>13C12-PCB-188</td><td style="text-align: center;">2000</td><td style="text-align: center;">23.46</td><td style="text-align: center;">79</td><td style="text-align: center;">30-140</td><td></td></tr> <tr> <td>13C12-PCB-189</td><td style="text-align: center;">2000</td><td style="text-align: center;">29.89</td><td style="text-align: center;">70</td><td style="text-align: center;">30-140</td><td></td></tr> <tr> <td>13C12-PCB-202</td><td style="text-align: center;">2000</td><td style="text-align: center;">26.23</td><td style="text-align: center;">102</td><td style="text-align: center;">30-140</td><td></td></tr> <tr> <td>13C12-PCB-205</td><td style="text-align: center;">2000</td><td style="text-align: center;">31.26</td><td style="text-align: center;">78</td><td style="text-align: center;">30-140</td><td></td></tr> <tr> <td>13C12-PCB-208</td><td style="text-align: center;">2000</td><td style="text-align: center;">29.63</td><td style="text-align: center;">88</td><td style="text-align: center;">30-140</td><td></td></tr> <tr> <td>13C12-PCB-206</td><td style="text-align: center;">2000</td><td style="text-align: center;">32.33</td><td style="text-align: center;">87</td><td style="text-align: center;">30-140</td><td></td></tr> <tr> <td>13C12-PCB-209</td><td style="text-align: center;">2000</td><td style="text-align: center;">33.46</td><td style="text-align: center;">79</td><td style="text-align: center;">30-140</td><td></td></tr> <tr> <td colspan="7"> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Cleanup Standards</th> <th style="text-align: center;">Time</th> <th style="text-align: center;">% Rec</th> <th colspan="3" style="text-align: center;">Limits</th> </tr> </thead> <tbody> <tr> <td>13C12-PCB-028</td><td style="text-align: center;">2000</td><td style="text-align: center;">15.93</td><td style="text-align: center;">53</td><td style="text-align: center;">40-125</td><td></td></tr> <tr> <td>13C12-PCB-111</td><td style="text-align: center;">2000</td><td style="text-align: center;">21.98</td><td style="text-align: center;">80</td><td style="text-align: center;">40-125</td><td></td></tr> <tr> <td>13C12-PCB-178</td><td style="text-align: center;">2000</td><td style="text-align: center;">25.02</td><td style="text-align: center;">95</td><td style="text-align: center;">40-125</td><td></td></tr> </tbody> </table> </td></tr> </tbody></table>	Extraction Standards	Time	% Rec	Limits			13C12-PCB-001	2000	8.85	28	30-140		13C12-PCB-003	2000	10.38	29	30-140		13C12-PCB-004	2000	10.55	35	30-140		13C12-PCB-015	2000	14.22	33	30-140		13C12-PCB-019	2000	12.56	44	30-140		13C12-PCB-037	2000	18.16	57	30-140		13C12-PCB-054	2000	14.41	46	30-140		13C12-PCB-081	2000	21.74	67	30-140		13C12-PCB-077	2000	22.04	65	30-140		13C12-PCB-104	2000	17.48	71	30-140		13C12-PCB-123	2000	23.04	74	30-140		13C12-PCB-118	2000	23.21	72	30-140		13C12-PCB-114	2000	23.50	74	30-140		13C12-PCB-105	2000	23.85	75	30-140		13C12-PCB-126	2000	25.44	84	30-140		13C12-PCB-155	2000	20.47	82	30-140		13C12-PCB-167	2000	26.34	78	30-140		13C12-PCB-156/157	4000	26.97	82	30-140		13C12-PCB-169	2000	28.61	85	30-140		13C12-PCB-188	2000	23.46	79	30-140		13C12-PCB-189	2000	29.89	70	30-140		13C12-PCB-202	2000	26.23	102	30-140		13C12-PCB-205	2000	31.26	78	30-140		13C12-PCB-208	2000	29.63	88	30-140		13C12-PCB-206	2000	32.33	87	30-140		13C12-PCB-209	2000	33.46	79	30-140		<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Cleanup Standards</th> <th style="text-align: center;">Time</th> <th style="text-align: center;">% Rec</th> <th colspan="3" style="text-align: center;">Limits</th> </tr> </thead> <tbody> <tr> <td>13C12-PCB-028</td><td style="text-align: center;">2000</td><td style="text-align: center;">15.93</td><td style="text-align: center;">53</td><td style="text-align: center;">40-125</td><td></td></tr> <tr> <td>13C12-PCB-111</td><td style="text-align: center;">2000</td><td style="text-align: center;">21.98</td><td style="text-align: center;">80</td><td style="text-align: center;">40-125</td><td></td></tr> <tr> <td>13C12-PCB-178</td><td style="text-align: center;">2000</td><td style="text-align: center;">25.02</td><td style="text-align: center;">95</td><td style="text-align: center;">40-125</td><td></td></tr> </tbody> </table>							Cleanup Standards	Time	% Rec	Limits			13C12-PCB-028	2000	15.93	53	40-125		13C12-PCB-111	2000	21.98	80	40-125		13C12-PCB-178	2000	25.02	95	40-125	
Target Analytes		Ret.	Limits				Flags																																																																																																																																																																																																																																																																																																																																																																	
	Time	% Rec																																																																																																																																																																																																																																																																																																																																																																						
PCB-001	1000	8.86	114	50-150																																																																																																																																																																																																																																																																																																																																																																				
PCB-003	1000	10.39	106	50-150																																																																																																																																																																																																																																																																																																																																																																				
PCB-004	1000	10.56	103	50-150																																																																																																																																																																																																																																																																																																																																																																				
PCB-015	1000	14.23	100	50-150																																																																																																																																																																																																																																																																																																																																																																				
PCB-019	1000	12.57	108	50-150																																																																																																																																																																																																																																																																																																																																																																				
PCB-037	1000	18.17	94	50-150																																																																																																																																																																																																																																																																																																																																																																				
PCB-054	1000	14.42	106	50-150																																																																																																																																																																																																																																																																																																																																																																				
PCB-081	1000	21.75	107	50-150																																																																																																																																																																																																																																																																																																																																																																				
PCB-077	1000	22.05	101	50-150																																																																																																																																																																																																																																																																																																																																																																				
PCB-104	1000	17.48	102	50-150																																																																																																																																																																																																																																																																																																																																																																				
PCB-123	1000	23.05	114	50-150																																																																																																																																																																																																																																																																																																																																																																				
PCB-118	1000	23.23	113	50-150																																																																																																																																																																																																																																																																																																																																																																				
PCB-114	1000	23.52	112	50-150																																																																																																																																																																																																																																																																																																																																																																				
PCB-105	1000	23.86	111	50-150																																																																																																																																																																																																																																																																																																																																																																				
PCB-126	1000	25.45	109	50-150																																																																																																																																																																																																																																																																																																																																																																				
PCB-155	1000	20.48	105	50-150																																																																																																																																																																																																																																																																																																																																																																				
PCB-167	1000	26.35	106	50-150																																																																																																																																																																																																																																																																																																																																																																				
PCB-156/157	2000	26.98	105	50-150																																																																																																																																																																																																																																																																																																																																																																				
PCB-169	1000	28.62	105	50-150																																																																																																																																																																																																																																																																																																																																																																				
PCB-188	1000	23.47	106	50-150																																																																																																																																																																																																																																																																																																																																																																				
PCB-189	1000	29.90	116	50-150																																																																																																																																																																																																																																																																																																																																																																				
PCB-202	1000	26.24	111	50-150																																																																																																																																																																																																																																																																																																																																																																				
PCB-205	1000	31.27	114	50-150																																																																																																																																																																																																																																																																																																																																																																				
PCB-208	1000	29.64	112	50-150																																																																																																																																																																																																																																																																																																																																																																				
PCB-206	1000	32.34	128	50-150																																																																																																																																																																																																																																																																																																																																																																				
PCB-209	1000	33.48	119	50-150																																																																																																																																																																																																																																																																																																																																																																				
<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Extraction Standards</th> <th style="text-align: center;">Time</th> <th style="text-align: center;">% Rec</th> <th colspan="3" style="text-align: center;">Limits</th> </tr> </thead> <tbody> <tr> <td>13C12-PCB-001</td><td style="text-align: center;">2000</td><td style="text-align: center;">8.85</td><td style="text-align: center;">28</td><td style="text-align: center;">30-140</td><td></td></tr> <tr> <td>13C12-PCB-003</td><td style="text-align: center;">2000</td><td style="text-align: center;">10.38</td><td style="text-align: center;">29</td><td style="text-align: center;">30-140</td><td></td></tr> <tr> <td>13C12-PCB-004</td><td style="text-align: center;">2000</td><td style="text-align: center;">10.55</td><td style="text-align: center;">35</td><td style="text-align: center;">30-140</td><td></td></tr> <tr> <td>13C12-PCB-015</td><td style="text-align: center;">2000</td><td style="text-align: center;">14.22</td><td style="text-align: center;">33</td><td style="text-align: center;">30-140</td><td></td></tr> <tr> <td>13C12-PCB-019</td><td style="text-align: center;">2000</td><td style="text-align: center;">12.56</td><td style="text-align: center;">44</td><td style="text-align: center;">30-140</td><td></td></tr> <tr> <td>13C12-PCB-037</td><td style="text-align: center;">2000</td><td style="text-align: center;">18.16</td><td style="text-align: center;">57</td><td style="text-align: center;">30-140</td><td></td></tr> <tr> <td>13C12-PCB-054</td><td style="text-align: center;">2000</td><td style="text-align: center;">14.41</td><td style="text-align: center;">46</td><td style="text-align: center;">30-140</td><td></td></tr> <tr> <td>13C12-PCB-081</td><td style="text-align: center;">2000</td><td style="text-align: center;">21.74</td><td style="text-align: center;">67</td><td style="text-align: center;">30-140</td><td></td></tr> <tr> <td>13C12-PCB-077</td><td style="text-align: center;">2000</td><td style="text-align: center;">22.04</td><td style="text-align: center;">65</td><td style="text-align: center;">30-140</td><td></td></tr> <tr> <td>13C12-PCB-104</td><td style="text-align: center;">2000</td><td style="text-align: center;">17.48</td><td style="text-align: center;">71</td><td style="text-align: center;">30-140</td><td></td></tr> <tr> <td>13C12-PCB-123</td><td style="text-align: center;">2000</td><td style="text-align: center;">23.04</td><td style="text-align: center;">74</td><td style="text-align: center;">30-140</td><td></td></tr> <tr> <td>13C12-PCB-118</td><td style="text-align: center;">2000</td><td style="text-align: center;">23.21</td><td style="text-align: center;">72</td><td style="text-align: center;">30-140</td><td></td></tr> <tr> <td>13C12-PCB-114</td><td style="text-align: center;">2000</td><td style="text-align: center;">23.50</td><td style="text-align: center;">74</td><td style="text-align: center;">30-140</td><td></td></tr> <tr> <td>13C12-PCB-105</td><td style="text-align: center;">2000</td><td style="text-align: center;">23.85</td><td style="text-align: center;">75</td><td style="text-align: center;">30-140</td><td></td></tr> <tr> <td>13C12-PCB-126</td><td style="text-align: center;">2000</td><td style="text-align: center;">25.44</td><td style="text-align: center;">84</td><td style="text-align: center;">30-140</td><td></td></tr> <tr> <td>13C12-PCB-155</td><td style="text-align: center;">2000</td><td style="text-align: center;">20.47</td><td style="text-align: center;">82</td><td style="text-align: center;">30-140</td><td></td></tr> <tr> <td>13C12-PCB-167</td><td style="text-align: center;">2000</td><td style="text-align: center;">26.34</td><td style="text-align: center;">78</td><td style="text-align: center;">30-140</td><td></td></tr> <tr> <td>13C12-PCB-156/157</td><td style="text-align: center;">4000</td><td style="text-align: center;">26.97</td><td style="text-align: center;">82</td><td style="text-align: center;">30-140</td><td></td></tr> <tr> <td>13C12-PCB-169</td><td style="text-align: center;">2000</td><td style="text-align: center;">28.61</td><td style="text-align: center;">85</td><td style="text-align: center;">30-140</td><td></td></tr> <tr> <td>13C12-PCB-188</td><td style="text-align: center;">2000</td><td style="text-align: center;">23.46</td><td style="text-align: center;">79</td><td style="text-align: center;">30-140</td><td></td></tr> <tr> <td>13C12-PCB-189</td><td style="text-align: center;">2000</td><td style="text-align: center;">29.89</td><td style="text-align: center;">70</td><td style="text-align: center;">30-140</td><td></td></tr> <tr> <td>13C12-PCB-202</td><td style="text-align: center;">2000</td><td style="text-align: center;">26.23</td><td style="text-align: center;">102</td><td style="text-align: center;">30-140</td><td></td></tr> <tr> <td>13C12-PCB-205</td><td style="text-align: center;">2000</td><td style="text-align: center;">31.26</td><td style="text-align: center;">78</td><td style="text-align: center;">30-140</td><td></td></tr> <tr> <td>13C12-PCB-208</td><td style="text-align: center;">2000</td><td style="text-align: center;">29.63</td><td style="text-align: center;">88</td><td style="text-align: center;">30-140</td><td></td></tr> <tr> <td>13C12-PCB-206</td><td style="text-align: center;">2000</td><td style="text-align: center;">32.33</td><td style="text-align: center;">87</td><td style="text-align: center;">30-140</td><td></td></tr> <tr> <td>13C12-PCB-209</td><td style="text-align: center;">2000</td><td style="text-align: center;">33.46</td><td style="text-align: center;">79</td><td style="text-align: center;">30-140</td><td></td></tr> <tr> <td colspan="7"> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Cleanup Standards</th> <th style="text-align: center;">Time</th> <th style="text-align: center;">% Rec</th> <th colspan="3" style="text-align: center;">Limits</th> </tr> </thead> <tbody> <tr> <td>13C12-PCB-028</td><td style="text-align: center;">2000</td><td style="text-align: center;">15.93</td><td style="text-align: center;">53</td><td style="text-align: center;">40-125</td><td></td></tr> <tr> <td>13C12-PCB-111</td><td style="text-align: center;">2000</td><td style="text-align: center;">21.98</td><td style="text-align: center;">80</td><td style="text-align: center;">40-125</td><td></td></tr> <tr> <td>13C12-PCB-178</td><td style="text-align: center;">2000</td><td style="text-align: center;">25.02</td><td style="text-align: center;">95</td><td style="text-align: center;">40-125</td><td></td></tr> </tbody> </table> </td></tr> </tbody></table>	Extraction Standards	Time	% Rec	Limits			13C12-PCB-001	2000	8.85	28	30-140		13C12-PCB-003	2000	10.38	29	30-140		13C12-PCB-004	2000	10.55	35	30-140		13C12-PCB-015	2000	14.22	33	30-140		13C12-PCB-019	2000	12.56	44	30-140		13C12-PCB-037	2000	18.16	57	30-140		13C12-PCB-054	2000	14.41	46	30-140		13C12-PCB-081	2000	21.74	67	30-140		13C12-PCB-077	2000	22.04	65	30-140		13C12-PCB-104	2000	17.48	71	30-140		13C12-PCB-123	2000	23.04	74	30-140		13C12-PCB-118	2000	23.21	72	30-140		13C12-PCB-114	2000	23.50	74	30-140		13C12-PCB-105	2000	23.85	75	30-140		13C12-PCB-126	2000	25.44	84	30-140		13C12-PCB-155	2000	20.47	82	30-140		13C12-PCB-167	2000	26.34	78	30-140		13C12-PCB-156/157	4000	26.97	82	30-140		13C12-PCB-169	2000	28.61	85	30-140		13C12-PCB-188	2000	23.46	79	30-140		13C12-PCB-189	2000	29.89	70	30-140		13C12-PCB-202	2000	26.23	102	30-140		13C12-PCB-205	2000	31.26	78	30-140		13C12-PCB-208	2000	29.63	88	30-140		13C12-PCB-206	2000	32.33	87	30-140		13C12-PCB-209	2000	33.46	79	30-140		<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Cleanup Standards</th> <th style="text-align: center;">Time</th> <th style="text-align: center;">% Rec</th> <th colspan="3" style="text-align: center;">Limits</th> </tr> </thead> <tbody> <tr> <td>13C12-PCB-028</td><td style="text-align: center;">2000</td><td style="text-align: center;">15.93</td><td style="text-align: center;">53</td><td style="text-align: center;">40-125</td><td></td></tr> <tr> <td>13C12-PCB-111</td><td style="text-align: center;">2000</td><td style="text-align: center;">21.98</td><td style="text-align: center;">80</td><td style="text-align: center;">40-125</td><td></td></tr> <tr> <td>13C12-PCB-178</td><td style="text-align: center;">2000</td><td style="text-align: center;">25.02</td><td style="text-align: center;">95</td><td style="text-align: center;">40-125</td><td></td></tr> </tbody> </table>							Cleanup Standards	Time	% Rec	Limits			13C12-PCB-028	2000	15.93	53	40-125		13C12-PCB-111	2000	21.98	80	40-125		13C12-PCB-178	2000	25.02	95	40-125																																																																																																																																																																								
Extraction Standards	Time	% Rec	Limits																																																																																																																																																																																																																																																																																																																																																																					
13C12-PCB-001	2000	8.85	28	30-140																																																																																																																																																																																																																																																																																																																																																																				
13C12-PCB-003	2000	10.38	29	30-140																																																																																																																																																																																																																																																																																																																																																																				
13C12-PCB-004	2000	10.55	35	30-140																																																																																																																																																																																																																																																																																																																																																																				
13C12-PCB-015	2000	14.22	33	30-140																																																																																																																																																																																																																																																																																																																																																																				
13C12-PCB-019	2000	12.56	44	30-140																																																																																																																																																																																																																																																																																																																																																																				
13C12-PCB-037	2000	18.16	57	30-140																																																																																																																																																																																																																																																																																																																																																																				
13C12-PCB-054	2000	14.41	46	30-140																																																																																																																																																																																																																																																																																																																																																																				
13C12-PCB-081	2000	21.74	67	30-140																																																																																																																																																																																																																																																																																																																																																																				
13C12-PCB-077	2000	22.04	65	30-140																																																																																																																																																																																																																																																																																																																																																																				
13C12-PCB-104	2000	17.48	71	30-140																																																																																																																																																																																																																																																																																																																																																																				
13C12-PCB-123	2000	23.04	74	30-140																																																																																																																																																																																																																																																																																																																																																																				
13C12-PCB-118	2000	23.21	72	30-140																																																																																																																																																																																																																																																																																																																																																																				
13C12-PCB-114	2000	23.50	74	30-140																																																																																																																																																																																																																																																																																																																																																																				
13C12-PCB-105	2000	23.85	75	30-140																																																																																																																																																																																																																																																																																																																																																																				
13C12-PCB-126	2000	25.44	84	30-140																																																																																																																																																																																																																																																																																																																																																																				
13C12-PCB-155	2000	20.47	82	30-140																																																																																																																																																																																																																																																																																																																																																																				
13C12-PCB-167	2000	26.34	78	30-140																																																																																																																																																																																																																																																																																																																																																																				
13C12-PCB-156/157	4000	26.97	82	30-140																																																																																																																																																																																																																																																																																																																																																																				
13C12-PCB-169	2000	28.61	85	30-140																																																																																																																																																																																																																																																																																																																																																																				
13C12-PCB-188	2000	23.46	79	30-140																																																																																																																																																																																																																																																																																																																																																																				
13C12-PCB-189	2000	29.89	70	30-140																																																																																																																																																																																																																																																																																																																																																																				
13C12-PCB-202	2000	26.23	102	30-140																																																																																																																																																																																																																																																																																																																																																																				
13C12-PCB-205	2000	31.26	78	30-140																																																																																																																																																																																																																																																																																																																																																																				
13C12-PCB-208	2000	29.63	88	30-140																																																																																																																																																																																																																																																																																																																																																																				
13C12-PCB-206	2000	32.33	87	30-140																																																																																																																																																																																																																																																																																																																																																																				
13C12-PCB-209	2000	33.46	79	30-140																																																																																																																																																																																																																																																																																																																																																																				
<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Cleanup Standards</th> <th style="text-align: center;">Time</th> <th style="text-align: center;">% Rec</th> <th colspan="3" style="text-align: center;">Limits</th> </tr> </thead> <tbody> <tr> <td>13C12-PCB-028</td><td style="text-align: center;">2000</td><td style="text-align: center;">15.93</td><td style="text-align: center;">53</td><td style="text-align: center;">40-125</td><td></td></tr> <tr> <td>13C12-PCB-111</td><td style="text-align: center;">2000</td><td style="text-align: center;">21.98</td><td style="text-align: center;">80</td><td style="text-align: center;">40-125</td><td></td></tr> <tr> <td>13C12-PCB-178</td><td style="text-align: center;">2000</td><td style="text-align: center;">25.02</td><td style="text-align: center;">95</td><td style="text-align: center;">40-125</td><td></td></tr> </tbody> </table>							Cleanup Standards	Time	% Rec	Limits			13C12-PCB-028	2000	15.93	53	40-125		13C12-PCB-111	2000	21.98	80	40-125		13C12-PCB-178	2000	25.02	95	40-125																																																																																																																																																																																																																																																																																																																																											
Cleanup Standards	Time	% Rec	Limits																																																																																																																																																																																																																																																																																																																																																																					
13C12-PCB-028	2000	15.93	53	40-125																																																																																																																																																																																																																																																																																																																																																																				
13C12-PCB-111	2000	21.98	80	40-125																																																																																																																																																																																																																																																																																																																																																																				
13C12-PCB-178	2000	25.02	95	40-125																																																																																																																																																																																																																																																																																																																																																																				



1435 Norjohn Court, Unit 1, Burlington, ON, Canada L7L 0E6

## SVOC DATA PACKAGE

### SECTION 6: INTERNAL RECORDS

Including:

- Prep Logs
- Independent calculation checks
- Others as listed below:

---

---

---

---

---

---

---

---

---

---

---

---



Batch ID: WG2191808

## **PCB Extraction Standard:**

(Checkmark)

**Syringe  
Used:**

### **Standard:**

Standard: 1668A-ES#2- 033F

**Spike Date:**

27 Oct 2015

## Spike Witnessing

**Chemist's Initials**

**Chemist:**

**Witness's Initials**

**Witness:** MP

**Witness's Initials**

### **Correct Syringe Obtained:**

**Witness's Initials**

31

## **Correct Standard Obtained**

**Witness's Initials**



	5	
	5	
	5	
	5	
	5	
	5	
	5	

BU-FM-1105d v04 1668A-HR-Waters PREP  
27-May-2015 / MK  
Page 4 of 8

**Reagent Lot Numbers:**

Reagent	Lot#	Manufacturer
Acetone	93035	
Hexane	93150	
DCM	92982	
Toluene	92243	
Acid Silica	ORG-A51-4230	
Neutral Silica	ORG-NS1-804	
Nitrogen	/	

L1688716-2 I found out that there was  
hair crack in bottom of flask lost almost  
all sample, few me was left (3 me)  
flask was rinsed well (10 times) with toluene.  
29 Oct 2015.

— L1688716-2, flask cracked & all the  
sample came into the Bio-wrap bath.  
Had to filter out bath (water & DCM) with  
Sodium Sulfate to retain sample.  
ORG-SSU-1345

**Procedure:****Extraction:**

- Mark the liquid level on the sample bottle. Sample Size = 1L

- Spike Extraction Standard in to ~1ml of Acetone, then add to the sample bottle with 2 acetone rinses.

- Shake the bottle and then transfer the sample in to a 2L sep-funnel.

- Filter the entire sample through glasswool

- Return the Filtrate to the sep-funnel, Dean-Stark soxhlet extract the glasswool/particulate with Toluene.

- Vigorously shake 100ml of DCM in the original sample bottle, then transfer to the sep-funnel.

- Shake sep-funnel (with venting) for two minutes.

- Collect the DCM layer through sodium sulphate in to a 500ml flask.

- Perform 2 more two minute extractions with 100ml DCM each, dry and combine with first extraction.

- Collect a ~50ml DCM rinse of the sodium sulphate in to the sample.

- Fill the original sample bottle up to the mark with tap water, then measure and record the volume using a grad cylinder.

- Roto-vap down to ~2ml

- Spike Samples with Cleanup Standards and immediately load on to Acid Silica or transfer to a c-tube with 3x2ml Hexane rinses.

~~Spike or STD~~ Blow down to 1ml

- Load the extract on to the Acid Silica column with 3x2ml Hexane rinses. (column is pre-rinsed with ~30ml Hexane)

- Elute to 50ml with Hexane.

- Reduce to 200uL, bulk up with 1mL of Hexane

- Perform Alumina Column:

- Pre-elute the Alumina Column with 7ml Hexane

- Place F1 c-tube under the column, then load the sample with 3x 1ml Hexane Rinses

- F1 1mL of Hexane

- F2 (PCB) 14ml 1:1 DCM:Hexane

- Blow down to ~1/2ml

- Vortex very well.

- Transfer every last drop to a micro-vial (no rinses).

- Blow down to the mark. (Micro-vial should contain 20uL Nonane, and the level should be marked.)

- Spike Injection Standard. Cap and Vortex FV = 25uL

**Approval of Deviation from Standard Method**

Procedure does not deviate from Standard Method.

(Batch Writer): \_\_\_\_\_

Procedure does deviate from Standard Method.

Approved (Supervisor/Manager): \_\_\_\_\_

**Comments:**

**• Label and save all columns.**

<b>Prep Analyst:</b>	Prep Analyst:				
<b>Date:</b>	Date:				
	Very Good	Meets Method Req	Some Outliers	Very Poor	Comments / Was spl/batch sent for rework? Why?
<b>MB</b>					
<b>LCS</b>					
<b>DUP</b>					
<b>ES rec</b>					

# ALS Life sciences

## Sample Calculation Report

### CS3 RRF Check

$$\text{RRF} = \frac{\text{Response of PCB-118}}{\text{Response of 13C12-PCB-118}} \times \frac{\text{Concentration of 13C12-PCB-118}}{\text{Concentration of PCB-118}}$$

Approved: *E. Sabljic*  
--e-signature--  
11-Dec-2015

$$\text{RRF} = \frac{1193133.60}{2257781.40} \times \frac{100}{50} = 1.06 \quad \text{Value from TargetLyn} \quad \boxed{x}$$

### Calculation of PCB-118 amount in L1685414-1

$$\text{pg/L} = \frac{\text{Response of PCB-118}}{\text{Response of 13C12-PCB-118}} \times \frac{\text{pg of 13C12-PCB-118 spiked}}{\text{Mean RRF}} * \text{Sample Size}$$

$$\text{pg/L} = \frac{462}{850638.1} \times \frac{2000}{0.97} * 1.04 = 1.08 \quad \boxed{1.08}$$

### Calculation of 13C12-PCB-118 Recovery in L1685414-1

$$\% \text{ Recovery} = \frac{\text{Response of 13C12-PCB-118}}{\text{Response of 13C12-PCB-101}} \times \frac{\text{pg of 13C12-PCB-101 spiked}}{\text{Mean RRF}} * \frac{100}{\text{pg 13C12-PCB-118 Spiked}}$$

$$\% \text{ Recovery} = \frac{850638.1}{751290.8} \times \frac{2000}{1.47} * \frac{100}{2000} = 77 \quad \boxed{77 \%}$$



1435 Norjohn Court, Unit 1, Burlington, ON, Canada L7L 0E6

## SVOC DATA PACKAGE

### SECTION 7: SHIPPING/RECEIVING DOCUMENTS

Including:

- Airbills
- Chain-of-Custody Records
- Sample Log-in Sheet(s) - where applicable
- Others as listed below:

---

---

---

---

---

---

---

---

---

---

---

---

---

---



# CHAIN OF CUSTODY / LABORATORY ANALYSIS REQUEST FORM

ALS Environmental

10450 Stancliff Road, Suite 210 Houston, TX 77099 Phone 713-266-1599

SR # L1685414

ALS Contact

Page

of

Project Name San Jacinto River Coalition		Project Number SJRC (b) (6)		ANALYSIS REQUESTED (Include Method Number and Container Preservative)																
Report To Arathi Kodur		Preservative																		
Company/Address ALS Group, USA, Corp. 10450 Stancliff Road, Suite 210 Houston, TX 77099		NUMBER OF CONTAINERS																		
Phone # 281-530-5656		1668A Full List																		
Sampler's Signature		Sampler's Printed Name																		
REMARKS																				
CLIENT SAMPLE ID	LAB ID	SAMPLING DATE	TIME	Matrix																
E1500973-002		9/29/2015	1310	water	1	X														
full list*																				
Special Instructions/Comments: Level 4, *ND =0.5 with WHO 2005 and 1998 (ak 10/5/15)					TURNAROUND REQUIREMENTS				REPORT REQUIREMENTS				INVOICE INFORMATION							
					<input type="checkbox"/> RUSH (SURCHARGES APPLY) <input checked="" type="checkbox"/> STANDARD				I. Results Only II. Results + QC Summaries (LCS, DUP, MS/MSD as required)				P.O. # E1500973							
					<input type="checkbox"/> REQUESTED FAX DATE				III. Results + QC and Calibration Summaries <input checked="" type="checkbox"/> IV. Data Validation Report with Raw Data				Bill to ALS							
					<input type="checkbox"/> REQUESTED REPORT DATE ASAP				Edata <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No											
Relinquished By <i>Arathi Kodur</i>	Received By <i>Paran Burton</i>	Relinquished By <i>ALS</i>	Received By <i>Paran Burton</i>	Relinquished By <i>ALS</i>	Received By <i>Paran Burton</i>	Relinquished By <i>ALS</i>	Received By <i>Paran Burton</i>													
Signature <i>Arathi Kodur</i>	Signature <i>Paran Burton</i>	Signature	Signature	Signature	Signature	Signature	Signature													
Printed Name <i>Arathi Kodur</i>	Printed Name <i>Paran Burton</i>	Printed Name	Printed Name	Printed Name	Printed Name	Printed Name	Printed Name													
Firm <i>ALS</i>	Firm <i>ALS</i>	Firm	Firm	Firm	Firm	Firm	Firm													
Date/Time <i>10/7/15 14:45</i>	Date/Time <i>8-Oct-2015 14:30</i>	Date/Time	Date/Time	Date/Time	Date/Time	Date/Time	Date/Time													



ALS Environmental  
www.alsglobal.com

# CHAIN OF CUSTODY / LABORATORY ANALYSIS REQUEST FORM

ALS Environmental  
10450 Stancliff Road, Suite 210- Houston, TX 77099 Phone 713-266-1599

SR #

L1685414

ALS Contact

Page \_\_\_\_\_

of \_\_\_\_\_

Project Name San Jacinto River Coalition		Project Number SJRC (b) (6)		ANALYSIS REQUESTED (Include Method Number and Container Preservative)														
Report To Arthi Kodur	Report CC		Preservative												Preservative Key			
Company/Address ALS Group, USA, Corp. 10450 Stancliff Road, Suite 210 Houston, TX 77099																0. None 1. HCL 2. HNO3 3. H2SO4 4. NaOH 5. Zn. Acetate 6. MeOH 7. NaHSO4		
Phone # 281-530-5656	FAX #																	
Sampler's Signature		Sampler's Printed Name																REMARKS
CLIENT SAMPLE ID	LAB ID	SAMPLING DATE	TIME	Matrix	NUMBER OF CONTAINERS	1668A Full List												
E1500973-002		9/29/2015	1310	water	1	X											full list*	
<i>Additional samples ale 12/2/15</i>																		
Special Instructions/Comments: Level 4, *ND =0.5 with WHO 2005 and 1998 (ak 10/5/15)					TURNAROUND REQUIREMENTS					REPORT REQUIREMENTS					INVOICE INFORMATION			
					<input type="checkbox"/> RUSH (SURCHARGES APPLY) <input checked="" type="checkbox"/> STANDARD					<input type="checkbox"/> I. Results Only <input type="checkbox"/> II. Results + QC Summaries <input type="checkbox"/> III. Results + QC and Calibration Summaries <input checked="" type="checkbox"/> IV. Data Validation Report with Raw Data					P.O. # E1500973 Bill to ALS			
					REQUESTED FAX DATE					REQUESTED REPORT DATE					Edata <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
Relinquished By  Printed Name Andrew Lopez Firm ALS HRMS Date/Time 12/2/15 1400		Received By  Printed Name Aaron Burton Firm ALS Date/Time 3-Dec-2015 14:45		Relinquished By Signature Printed Name Firm Date/Time		Received By Signature Printed Name Firm Date/Time		Relinquished By Signature Printed Name Firm Date/Time		Received By Signature Printed Name Firm Date/Time								

## Sample Receiving Log

Date/Time Received	Contract Number	Number/Description of Containers	Temp. on Receipt*	Condition of Samples	Receiver's Initials	Date/Time Login Completed	Submission ID	Sample ID Range
8-Oct-2015 14:30	ALS Houston	6x 1L amber bottles 4x jars of soil 1x jar of fish product	4.2 °C	Good ALS Driver / FedEx 6468 6847 4992 6468 6847 4981	NG	8-Oct-2015 15:45	L1685414 L1685407 L1685436 L1685418 L1685416	-1 -1-4 -1 -1-4 -1

\*Temperatures were recorded using:  Oakton infraPro' dedicated I.R. gun (serial # 2472100201-0040)

Other (specify): \_\_\_\_\_

### BU-FM-0261c v01 Sample Receiving Log

Date Issued: 5-Feb-13

Form Page 1 of 1

Page: 193

## Sample Receiving Log

Date/Time Received	Contract Number	Number/Description of Containers	Temp. on Receipt*	Condition of Samples	Receiver's Initials	Date/Time Login Completed	Submission ID	Sample ID Range
3-Dec-2015 14:45	ALS Houston	2x 1L amber bottles	2.5°C	Good ALS Driver/FedEx 646868475820	AB	Already logged in	L1685414 L1685416	-1 -1

\*Temperatures were recorded using:

Oakton infraPro' dedicated I.R. gun (serial # 2472100201-0040)

Other (specify): \_\_\_\_\_

### BU-FM-0261c v01 Sample Receiving Log

Date Issued: 5-Feb-13

Form Page 1 of 1

Page: 235

## SVOC DATA PACKAGE

### APPENDIX 1: INSTRUMENT OUTPUT DOCUMENTS

Including For Each Analytical Sequence::

- The scanned instrument runlogs
- Quantification Tables
- Quantify Audit Report
- Instrument output (SICP chromatograms) indicating the integrations used for quantification including:
  - GC chromatographic resolution checks, where appropriate
  - SICPs for the run
  - SICP chromatograms indicating both the automated and manual peak integrations where this has been edited
  - Individual Quantitation Reports
- Reference peak profiles indicating the mass resolution
  - Pre-run mass calibration check printouts
  - Post-run mass calibration check printouts

Det: 325

Column 56507-01A

## Sample List Report

## MassLynx 4.1 SCN815 SCN795

Sample List: C:\MassLynx\Default.pro\Sampledb\5-150917B-RUN.SPL

Page 1 of 2

Last Modified: Thursday, September 17, 2015 18:52:19 Eastern Daylight Time

Printed: Friday, September 18, 2015 10:05:14 Eastern Daylight Time

Page Position (1, 1)

	File Name	Sample ID	File Text	Sample Type	MS File	Inlet File	Bottle
1	5-150917B01	H5-15-CS1-011	1668A-CS#1-015	Standard	1668_octyl_1	1668_octyl_1	Tray1:5
2	5-150917B02	H5-15-CS0-011	1668A-CS#0-015	Standard	1668_octyl_1	1668_octyl_1	Tray1:6
3	5-150917B03	H5-15-CS5-011	1668A-CS#5-015	Standard	1668_octyl_1	1668_octyl_1	Tray1:7
4	5-150917B04	H5-15-CS4-011	1668A-CS#4-015	Standard	1668_octyl_1	1668_octyl_1	Tray1:8
5	5-150917B05	H5-15-CS3-011	1668A-CS#3-015	Standard	1668_octyl_1	1668_octyl_1	Tray1:3
6	5-150917B06	H5-15-CS2-011	1668A-CS#2-015	Standard	1668_octyl_1	1668_octyl_1	Tray1:4
7	5-150917B07	H5-15-RS1-011	1668A-RS#1-015	Standard	1668_octyl_1	1668_octyl_1	Tray1:9
8	5-150917B08	H5-15-WDM-214	1668A-CS#6-015B	Standard	1668_octyl_1	1668_octyl_1	Tray1:1
9	5-150917B09	H5-15-CCV-402	1668A-CS#3-015	Standard	1668_octyl_1	1668_octyl_1	Tray1:3
10	5-150917B10	WG2154370-2	LCS	Analyte	1668_octyl_1	1668_octyl_1	Tray1:46
11	5-150917B11	Toluene	INST BLANK	Blank	1668_octyl_1	1668_octyl_1	Tray1:2
12	5-150917B12	WG2154370-1	MB	Analyte	1668_octyl_1	1668_octyl_1	Tray1:47
13	5-150917B13	L1654475-1	Sample	Analyte	1668_octyl_1	1668_octyl_1	Tray1:48
14	5-150917B14	WG2154370-4	Sample	Analyte	1668_octyl_1	1668_octyl_1	Tray1:49
15	5-150917B15	L1654475-2	Sample	Analyte	1668_octyl_1	1668_octyl_1	Tray1:50
16	5-150917B16	L1654475-3	Sample	Analyte	1668_octyl_1	1668_octyl_1	Tray1:51
17	5-150917B17	L1654475-4	Sample	Analyte	1668_octyl_1	1668_octyl_1	Tray1:52
18	5-150917B18	L1654475-5	Sample	Analyte	1668_octyl_1	1668_octyl_1	Tray1:53
19	5-150917B19	L1654475-6	Sample	Analyte	1668_octyl_1	1668_octyl_1	Tray1:54
20	5-150917B20	L1654475-7	Sample	Analyte	1668_octyl_1	1668_octyl_1	Tray1:55
21	5-150917B21	L1654475-8	Sample	Analyte	1668_octyl_1	1668_octyl_1	Tray1:56
22	5-150917B22	L1654475-9	Sample	Analyte	1668_octyl_1	1668_octyl_1	Tray1:57
23	5-150917B23	L1654475-10	Sample	Analyte	1668_octyl_1	1668_octyl_1	Tray1:58
24	5-150917B24	H5-15-CCV-403	1668A-CS#3-015	Standard	1668_octyl_1	1668_octyl_1	Tray1:3
25	5-150917B25	H5-15-WDM-214	1668A-CS#6-015B	Standard	1668_octyl_1	1668_octyl_1	Tray1:1
26	5-150917B26	Toluene	INST BLANK	Blank	1668_octyl_1	1668_octyl_1	Tray1:2
27	5-150917B27	L1654444-1C	Sample dil	Analyte	1668_octyl_1	1668_octyl_1	Tray1:12
28	5-150917B28	Toluene	INST BLANK	Blank	1668_octyl_1	1668_octyl_1	Tray1:2
29	5-150917B29	L1658777-7	Sample dil	Analyte	1668_octyl_1	1668_octyl_1	Tray1:61
30	5-150917B30	Toluene	INST BLANK	Blank	1668_octyl_1	1668_octyl_1	Tray1:2
31	5-150917B31	H5-15-CCV-404	1668A-CS#3-015	Standard	1668_octyl_1	1668_octyl_1	Tray1:3

Mass Res 1v2v3 interface at 181 ✓

17B1

IS 520 partial

209 J

Batch J

Rec 1689 ✓

MB → put in historical data

CS5 ✓

204 RP ✓

ZIP

17B2.RP

17B2

IS 531 partial

209 J

Batch J

17B0

RS1 J

RS204 J

**Sample List Report****MassLynx MassLynx V4.1 SCN 901**

Sample List: C:\MassLynx\PCB.PRO\SampleDB\5-150917B-ICAL.SPL  
Last Modified: Wednesday, November 11, 2015 18:42:04 Eastern Standard Time  
Printed: Monday, November 30, 2015 16:01:09 Eastern Standard Time

Page 1 of 1

Page Position (1, 1)

	<b>File Name</b>	<b>Sample ID</b>	<b>File Text</b>	<b>Sample Type</b>	<b>Na Conc A</b>	<b>Na Conc B</b>	<b>Na Conc C</b>	<b>Na Conc D</b>	<b>Na Conc E</b>	<b>Na Conc F</b>	<b>ES Conc</b>	<b>IS Conc</b>	<b>CS Conc</b>	<b>Quan Meth</b>	<b>Quan Ref</b>	<b>Sample Size</b>
1	5-150917B01	H5-15-CS1-011	1668A-CS#1-015	Standard	1	1	1	2	---	---	---	---	100	---	---	1.000
2	5-150917B06	H5-15-CS2-011	1668A-CS#2-015	Standard	5	5	5	10	---	---	---	---	100	---	---	1.000
3	5-150917B05	H5-15-CS3-011	1668A-CS#3-015	Standard	50	50	50	100	---	---	---	---	100	---	---	1.000
4	5-150917B04	H5-15-CS4-011	1668A-CS#4-015	Standard	400	400	400	800	---	---	---	---	100	---	---	1.000
5	5-150917B03	H5-15-CS5-011	1668A-CS#5-015	Standard	2000	2000	2000	4000	---	---	---	---	100	---	---	1.000

**Sample List Report****MassLynx MassLynx V4.1 SCN 901**

Sample List:

C:\MassLynx\PCB.PRO\SampleDB\5-150917B-Q1.SPL

Page 1 of 1

Last Modified:

Wednesday, November 11, 2015 18:56:35 Eastern Standard Time

Printed:

Monday, November 30, 2015 16:00:02 Eastern Standard Time

Page Position (1, 1)

	<b>File Name</b>	<b>Sample ID</b>	<b>File Text</b>	<b>Sample Type</b>	<b>Na Conc A</b>	<b>Na Conc B</b>	<b>Na Conc C</b>	<b>Na Conc D</b>	<b>Na Conc E</b>	<b>Na Conc F</b>	<b>Na Conc G</b>	<b>Na Conc H</b>	<b>FS Conc</b>	<b>CS Conc</b>	<b>ES Conc 1</b>	<b>ES Conc 2</b>	<b>IS Conc</b>	<b>Sample Size</b>	<b>Quan Meth</b>	<b>Quan Ref</b>	
1	5-150917B08	H5-15-WDM-216	1668A-CS#6-015B	Standard	50	100	150	200	300	400	500	600	100	100	100	200	100	1.000	---	---	
2	5-150917B02	H5-15-CS0-011	1668A-CS#0-015	QC	.2	.2	.2	.4	---	---	---	---	100	100	100	200	100	1.000	---	---	
3	5-150917B07	H5-15-RS1-011	1668A-RS#1-015	QC	50	50	50	100	---	---	---	---	100	100	100	200	100	1.000	---	---	
4	5-150917B09	H5-15-CCV-0400	1668A-CS#3-015	QC	50	50	50	50	100	---	---	---	---	100	100	100	200	100	1.000	---	---

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

**Method: C:\MassLynx\PCB.PRO\MethDB\1668-OCTYL-1-ICAL.mdb 11 Nov 2015 18:20:52****Calibration: C:\MassLynx\PCB.PRO\CurveDB\5-150917B-CAL5-1668OCTYL.cdb 11 Nov 2015 18:43:37****Name: 5-150917B01, Date: 17-Sep-2015, Time: 15:09:57, ID: H5-15-CS1-011, Description: 1668A-CS#1-015, Vial: Tray1:5**

	# Target Analyte	#Hom	Resp	Ion 1 Area	Ion 2 Area	Ra	Ra Fail=YES	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.	Comment	Noise 1	Noise 2
1	1 PCB-1		1	4475		3.52	NO	8.86	1.00	8.83	8.90	0.838	83.8			388	487
2	2 PCB-3		1	4171		3.56	NO	10.40	1.00	10.37	10.44	0.810	81.0			388	487
3	3 PCB-4		1	5279		1.36	NO	10.58	1.00	10.54	10.61	0.809	80.9			949	4378
4	4 PCB-15		1	6755		1.48	NO	14.26	1.00	14.23	14.29	0.780	78.0			1091	3506
5	5 PCB-19		1	4176		1.10	NO	12.58	1.00	12.55	12.62	0.769	76.9			746	616
6	6 PCB-37		1	6717		1.05	NO	18.22	1.00	18.18	18.25	0.737	73.7			851	813
7	7 PCB-54		1	6725		0.74	NO	14.45	1.00	14.42	14.48	0.778	77.8			588	1357
8	8 PCB-81		1	7902		0.69	NO	21.80	1.00	21.76	21.83	0.784	78.4			1219	2965
9	9 PCB-77		1	9086		0.70	NO	22.09	1.00	22.05	22.12	0.842	84.2			1219	2965
10	10 PCB-104		1	4619		1.69	NO	17.54	1.00	17.51	17.57	0.783	78.3			349	555
11	11 PCB-123		1	4012	62909	1.45	NO	23.10	1.00	23.07	23.14	0.730	73.0			528	506
12	12 PCB-118		1	3974		1.66	NO	23.28	1.00	23.24	23.31	0.710	71.0			528	506
13	13 PCB-114		1	4239		1.54	NO	23.58	1.00	23.54	23.61	0.748	74.8			528	506
14	14 PCB-105		1	4138		1.57	NO	23.91	1.00	23.88	23.95	0.749	74.9			528	506
15	15 PCB-126		1	4169	19451	1.55	NO	25.49	1.00	25.45	25.52	0.745	74.5			528	506
16	16 PCB-155		1	5208	5459	1.35	NO	20.56	1.00	20.53	20.59	0.777	77.7			332	336
17	17 PCB-167		1	5294		1.21	NO	26.41	1.00	26.38	26.45	0.777	77.7			461	446
18	18 PCB-156/157		2	10211		1.25	NO	27.03	1.00	26.99	27.06	1.560	78.0			461	446
19	19 PCB-169		1	4616		1.25	NO	28.67	1.00	28.64	28.71	0.736	73.6			461	446
20	20 PCB-188		1	5167		1.09	NO	23.54	1.00	23.51	23.58	0.769	76.9			682	330
21	21 PCB-189		1	4124		1.04	NO	29.95	1.00	29.92	29.98	0.737	73.7			574	301
22	22 PCB-202		1	4446		0.89	NO	26.30	1.00	26.26	26.33	0.778	77.8			340	419
23	23 PCB-205		1	3753		0.93	NO	31.35	1.00	31.32	31.38	0.747	74.7			368	489
24	24 PCB-208		1	4111		0.72	NO	29.71	1.00	29.67	29.74	0.774	77.4			738	1755
25	25 PCB-206		1	2552		0.73	NO	32.43	1.00	32.40	32.47	0.735	73.5			738	1755
26	26 PCB-209		1	2626		1.14	NO	33.57	1.00	33.54	33.60	0.787	78.7			144	296
27	27 13C-PCB-31		126	960867		1.05	NO	15.81	1.26	15.77	15.84	101.426	101.4			74743	12291
28	28 13C-PCB-95		71	403767		1.56	NO	19.12	1.09	19.09	19.16	103.988	104.0			931	892
29	29 13C-PCB-153		89	532889	22373	1.29	NO	24.21	0.92	24.18	24.25	102.293	102.3			2654	1409
30	30 13C-PCB-28		171	994516		1.05	NO	15.98	0.94	15.94	16.01	95.887	95.9			74743	12291
31	31 13C-PCB-111		129	546378		1.59	NO	22.04	1.07	22.01	22.08	97.778	97.8			931	892
32	32 13C-PCB-178		87	464853		1.06	NO	25.08	1.01	25.05	25.12	102.883	102.9			2758	1430
33	33 13C-PCB-1		114	679179		3.12	NO	8.85	0.75	8.82	8.88	92.140	92.1			1139	7462
34	34 13C-PCB-3		103	620457		3.07	NO	10.39	0.88	10.36	10.42	91.811	91.8			1139	7462

## Quantify Sample Summary Report

## MassLynx MassLynx V4.1 SCN 901

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Name: 5-150917B01, Date: 17-Sep-2015, Time: 15:09:57, ID: H5-15-CS1-011, Description: 1668A-CS#1-015, Vial: Tray1:5

	# Target Analyte	#Hom	Resp	Ion 1 Area	Ion 2 Area	Ra	Ra Fail=YES	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.	Comment	Noise 1	Noise 2
35	35 13C-PCB-4		64	599550		1.61	NO	10.56	0.89	10.53	10.60	97.413	97.4			6247	2033
36	36 13C-PCB-15		91	870773		1.58	NO	14.25	1.20	14.22	14.28	91.635	91.6			18196	3372
37	37 13C-PCB-19		46	544165		1.07	NO	12.57	1.06	12.54	12.60	102.077	102.1			35755	23736
38	38 13C-PCB-37		167	972296		1.05	NO	18.20	1.07	18.16	18.23	91.735	91.7			74743	12291
39	39 13C-PCB-54		126	832836		0.81	NO	14.44	0.85	14.41	14.48	101.338	101.3			4379	2091
40	40 13C-PCB-81		150	919985		0.79	NO	21.78	1.05	21.75	21.81	91.746	91.7			3371	3195
41	41 13C-PCB-77		165	1017690		0.79	NO	22.08	1.07	22.05	22.11	92.590	92.6			3371	3195
42	42 13C-PCB-104		127	537034		1.61	NO	17.52	0.85	17.49	17.56	103.170	103.2			596	528
43	43 13C-PCB-123		131	554755	62909	1.61	NO	23.09	1.12	23.06	23.12	94.665	94.7			3293	2331
44	44 13C-PCB-118		138	584688		1.60	NO	23.26	1.13	23.23	23.30	94.435	94.4			3293	2331
45	45 13C-PCB-114		130	549784		1.59	NO	23.57	1.14	23.53	23.60	93.559	93.6			3293	2331
46	46 13C-PCB-105		132	560842		1.58	NO	23.90	1.16	23.87	23.93	93.296	93.3			3293	2331
47	47 13C-PCB-126		130	546010		1.62	NO	25.48	1.23	25.44	25.51	90.788	90.8			3293	2331
48	48 13C-PCB-155		140	676452	5459	1.28	NO	20.54	0.99	20.51	20.58	102.848	102.8			627	672
49	49 13C-PCB-167		117	563164		1.29	NO	26.40	1.06	26.37	26.44	96.565	96.6			2654	1409
50	50 13C-PCB-156/157		237	1140044		1.29	NO	27.02	1.09	26.98	27.05	191.904	96.0			2654	1409
51	51 13C-PCB-169		120	581644		1.28	NO	28.66	1.15	28.63	28.69	95.523	95.5			2654	1409
52	52 13C-PCB-188		133	710984		1.06	NO	23.53	0.95	23.50	23.56	102.266	102.3			2758	1430
53	53 13C-PCB-189		119	640418		1.06	NO	29.94	1.20	29.91	29.97	90.839	90.8			5337	3215
54	54 13C-PCB-202		97	559926		0.92	NO	26.29	1.06	26.25	26.32	104.041	104.0			1040	1142
55	55 13C-PCB-205		138	620552		0.90	NO	31.33	1.01	31.29	31.36	98.370	98.4			2263	4136
56	56 13C-PCB-208		114	549701		0.78	NO	29.70	0.96	29.66	29.73	103.343	103.3			1723	2416
57	57 13C-PCB-206		81	390243		0.79	NO	32.41	1.04	32.37	32.44	102.087	102.1			1723	2416
58	58 13C-PCB-209		102	403190		1.18	NO	33.56	1.08	33.52	33.59	98.451	98.5			202	227
59	59 13C-PCB-9		2457655	942030		1.61	NO	11.84	0.48	11.81	11.88	91.096	91.1			6247	2033
60	60 13C-PCB-52		1192841	667736		0.79	NO	16.98	0.68	16.95	17.01	90.613	90.6			3793	1399
61	61 13C-PCB-101		1100842	426965	2075	1.58	NO	20.66	0.83	20.62	20.69	88.292	88.3			931	892
62	62 13C-PCB-138		1103128	477050	29639	1.31	NO	24.87	0.00	24.84	24.91	87.862	87.9			2654	1409
63	63 13C-PCB-194		857800	453341		0.89	NO	31.05	1.25	31.01	31.08	83.181	83.2			2263	4136

## Quantify Sample Summary Report

## MassLynx MassLynx V4.1 SCN 901

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Name: 5-150917B06, Date: 17-Sep-2015, Time: 18:44:53, ID: H5-15-CS2-011, Description: 1668A-CS#2-015, Vial: Tray1:4

	# Target Analyte	#Hom	Resp	Ion 1 Area	Ion 2 Area	Ra	Ra Fail=YES	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.	Comment	Noise 1	Noise 2
1	1 PCB-1		4	30784		3.28	NO	8.88	1.00	8.84	8.91	5.042	100.8			471	455
2	2 PCB-3		5	30154		3.23	NO	10.41	1.00	10.38	10.45	5.062	101.2			471	455
3	3 PCB-4		5	27280		1.52	NO	10.59	1.00	10.55	10.62	4.718	94.4			1039	4254
4	4 PCB-15		5	44660		1.55	NO	14.28	1.00	14.24	14.31	4.981	99.6			925	2492
5	5 PCB-19		5	21348		1.08	NO	12.61	1.00	12.57	12.64	4.586	91.7			700	504
6	6 PCB-37		5	50847		1.01	NO	18.23	1.00	18.20	18.27	4.904	98.1			851	881
7	7 PCB-54		5	33374		0.81	NO	14.47	1.00	14.43	14.50	4.640	92.8			543	1377
8	8 PCB-81		5	53447		0.73	NO	21.81	1.00	21.78	21.85	4.798	96.0			991	2712
9	9 PCB-77		5	58589		0.74	NO	22.11	1.00	22.08	22.15	4.841	96.8			991	2712
10	10 PCB-104		5	25626		1.66	NO	17.56	1.00	17.53	17.59	4.609	92.2			400	321
11	11 PCB-123		4	26108		1.62	NO	23.13	1.00	23.09	23.16	4.655	93.1			684	600
12	12 PCB-118		5	29579		1.62	NO	23.30	1.00	23.27	23.33	4.722	94.4			684	600
13	13 PCB-114		5	28405		1.65	NO	23.59	1.00	23.55	23.62	4.705	94.1			684	600
14	14 PCB-105		5	28071		1.68	NO	23.94	1.00	23.90	23.97	4.707	94.1			684	600
15	15 PCB-126		5	29975		1.64	NO	25.51	1.00	25.48	25.54	4.703	94.1			684	600
16	16 PCB-155		5	30211		1.31	NO	20.58	1.00	20.55	20.61	4.573	91.5			364	348
17	17 PCB-167		5	33452		1.28	NO	26.44	1.00	26.40	26.47	4.631	92.6			573	586
18	18 PCB-156/157		11	66872		1.27	NO	27.05	1.00	27.02	27.08	9.482	94.8			573	586
19	19 PCB-169		5	31590		1.27	NO	28.69	1.00	28.66	28.73	4.655	93.1			573	586
20	20 PCB-188		4	29708		1.07	NO	23.57	1.00	23.53	23.60	4.434	88.7			566	403
21	21 PCB-189		4	31368		1.01	NO	29.98	1.00	29.94	30.01	4.639	92.8			800	514
22	22 PCB-202		4	23950		0.92	NO	26.32	1.00	26.29	26.35	4.405	88.1			384	483
23	23 PCB-205		4	25990		0.88	NO	31.37	1.00	31.34	31.41	4.433	88.7			457	581
24	24 PCB-208		4	24513	9152	0.75	NO	29.73	1.00	29.70	29.77	4.473	89.5			849	2138
25	25 PCB-206		4	15409		0.76	NO	32.46	1.00	32.42	32.49	4.243	84.9			849	2138
26	26 PCB-209		3	16358		1.16	NO	33.61	1.00	33.58	33.65	4.283	85.7			127	281
27	27 13C-PCB-31		130	1002665		1.06	NO	15.83	1.26	15.79	15.86	104.540	104.5			30416	10691
28	28 13C-PCB-95		69	413922	7750	1.56	NO	19.14	1.09	19.11	19.17	100.426	100.4			957	690
29	29 13C-PCB-153		88	553576		1.30	NO	24.24	0.92	24.20	24.27	100.917	100.9			2035	1962
30	30 13C-PCB-28		188	1060176		1.05	NO	16.00	0.94	15.96	16.03	105.213	105.2			30416	10691
31	31 13C-PCB-111		135	579709		1.58	NO	22.07	1.07	22.04	22.10	102.482	102.5			957	690
32	32 13C-PCB-178		82	457515		1.08	NO	25.11	1.01	25.07	25.14	97.280	97.3			2662	1701
33	33 13C-PCB-1		130	730898		3.14	NO	8.86	0.75	8.83	8.90	105.536	105.5			1015	9131
34	34 13C-PCB-3		116	662466		3.09	NO	10.40	0.88	10.37	10.44	104.085	104.1			1015	9131
35	35 13C-PCB-4		64	567248		1.62	NO	10.58	0.89	10.54	10.61	97.830	97.8			14262	2126
36	36 13C-PCB-15		103	929692		1.57	NO	14.27	1.20	14.23	14.30	103.095	103.1			23537	3790
37	37 13C-PCB-19		41	453667		1.10	NO	12.59	1.06	12.56	12.63	91.365	91.4			21701	15379
38	38 13C-PCB-37		191	1076349		1.06	NO	18.22	1.07	18.18	18.25	105.049	105.0			30416	10691

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

**Name: 5-150917B06, Date: 17-Sep-2015, Time: 18:44:53, ID: H5-15-CS2-011, Description: 1668A-CS#2-015, Vial: Tray1:4**

	# Target Analyte	#Hom	Resp	Ion 1 Area	Ion 2 Area	Ra	Ra Fail=YES	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.	Comment	Noise 1	Noise 2
39	39 13C-PCB-54		113	722556		0.81	NO	14.46	0.85	14.43	14.49	90.574	90.6			2773	1620
40	40 13C-PCB-81		168	1036929		0.80	NO	21.81	1.05	21.77	21.84	102.882	102.9			2246	1862
41	41 13C-PCB-77		188	1169500		0.78	NO	22.10	1.07	22.06	22.13	105.288	105.3			2246	1862
42	42 13C-PCB-104		117	499173		1.61	NO	17.54	0.85	17.51	17.57	95.322	95.3			539	393
43	43 13C-PCB-123		142	612101		1.58	NO	23.11	1.12	23.08	23.15	102.498	102.5			3002	2676
44	44 13C-PCB-118		151	646593		1.60	NO	23.29	1.13	23.25	23.32	103.325	103.3			3002	2676
45	45 13C-PCB-114		143	613354		1.59	NO	23.58	1.14	23.54	23.61	103.273	103.3			3002	2676
46	46 13C-PCB-105		147	627602		1.59	NO	23.92	1.16	23.89	23.96	103.903	103.9			3002	2676
47	47 13C-PCB-126		152	650767		1.60	NO	25.50	1.23	25.47	25.53	106.382	106.4			3002	2676
48	48 13C-PCB-155		134	653657		1.28	NO	20.56	0.99	20.53	20.59	98.826	98.8			724	491
49	49 13C-PCB-167		121	612471		1.29	NO	26.43	1.06	26.39	26.46	99.719	99.7			2035	1962
50	50 13C-PCB-156/157		244	1241536		1.29	NO	27.04	1.09	27.01	27.07	197.748	98.9			2035	1962
51	51 13C-PCB-169		124	632910		1.28	NO	28.68	1.15	28.65	28.72	98.587	98.6			2035	1962
52	52 13C-PCB-188		125	701435		1.07	NO	23.55	0.95	23.52	23.59	95.835	95.8			2662	1701
53	53 13C-PCB-189		135	763039		1.06	NO	29.96	1.20	29.93	30.00	102.824	102.8			4209	5328
54	54 13C-PCB-202		89	541673		0.91	NO	26.31	1.06	26.28	26.34	95.081	95.1			1381	1465
55	55 13C-PCB-205		139	701904		0.91	NO	31.36	1.01	31.33	31.40	99.640	99.6			3760	3817
56	56 13C-PCB-208		107	579425	9152	0.78	NO	29.72	0.96	29.69	29.75	96.788	96.8			2231	2585
57	57 13C-PCB-206		77	414284		0.79	NO	32.44	1.04	32.41	32.48	96.375	96.4			2231	2585
58	58 13C-PCB-209		105	464593		1.18	NO	33.58	1.08	33.55	33.62	101.248	101.2			203	194
59	59 13C-PCB-9		2324123	886789		1.62	NO	11.86	0.48	11.82	11.89	86.147	86.1			14262	2126
60	60 13C-PCB-52		1159526	646868		0.79	NO	17.00	0.68	16.96	17.03	88.083	88.1			2349	1516
61	61 13C-PCB-101		1110254	427148		1.60	NO	20.68	0.83	20.64	20.71	89.047	89.0			957	690
62	62 13C-PCB-138		1163985	509193		1.29	NO	24.90	0.00	24.86	24.93	92.709	92.7			2035	1962
63	63 13C-PCB-194		964066	509311		0.89	NO	31.08	1.25	31.05	31.12	93.485	93.5			3760	3817

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Name: 5-150917B05, Date: 17-Sep-2015, Time: 18:07:06, ID: H5-15-CS3-011, Description: 1668A-CS#3-015, Vial: Tray1:3

	# Target Analyte	#Hom	Resp	Ion 1 Area	Ion 2 Area	Ra	Ra Fail=YES	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.	Comment	Noise 1	Noise 2
1	1 PCB-1		47	472526		3.11	NO	8.85	1.00	8.82	8.88	54.194	108.4			879	466
2	2 PCB-3		50	453250		3.10	NO	10.39	1.00	10.36	10.42	54.067	108.1			879	466
3	3 PCB-4		52	431232		1.55	NO	10.56	1.00	10.53	10.60	53.189	106.4			1203	4352
4	4 PCB-15		50	642801		1.54	NO	14.25	1.00	14.22	14.28	52.432	104.9			935	2600
5	5 PCB-19		54	360740		1.08	NO	12.58	1.00	12.55	12.62	53.515	107.0			734	594
6	6 PCB-37		50	727841	138834	1.02	NO	18.21	1.00	18.17	18.24	53.232	106.5			853	847
7	7 PCB-54		53	560411		0.80	NO	14.44	1.00	14.41	14.48	53.161	106.3			816	1328
8	8 PCB-81		55	767458		0.78	NO	21.79	1.00	21.75	21.82	52.876	105.8			1075	2568
9	9 PCB-77		52	811629		0.77	NO	22.09	1.00	22.05	22.12	51.908	103.8			1075	2568
10	10 PCB-104		60	426676		1.58	NO	17.53	1.00	17.50	17.56	53.114	106.2			529	416
11	11 PCB-123		50	416798		1.56	NO	23.10	1.00	23.07	23.14	53.836	107.7			1937	1936
12	12 PCB-118		53	460535		1.58	NO	23.28	1.00	23.24	23.31	54.021	108.0			1937	1936
13	13 PCB-114		54	445212		1.58	NO	23.57	1.00	23.53	23.60	53.453	106.9			1937	1936
14	14 PCB-105		53	443805		1.57	NO	23.91	1.00	23.88	23.95	53.697	107.4			1937	1936
15	15 PCB-126		54	461126		1.59	NO	25.49	1.00	25.45	25.52	53.815	107.6			1937	1936
16	16 PCB-155		54	488425		1.27	NO	20.55	1.00	20.52	20.59	53.019	106.0			443	394
17	17 PCB-167		62	515579		1.26	NO	26.41	1.00	26.38	26.45	53.277	106.6			1859	1840
18	18 PCB-156/157		120	1009391		1.26	NO	27.03	1.00	26.99	27.06	106.771	106.8			1859	1840
19	19 PCB-169		58	494804		1.27	NO	28.67	1.00	28.64	28.71	54.587	109.2			1859	1840
20	20 PCB-188		51	493889		1.05	NO	23.54	1.00	23.51	23.58	53.469	106.9			1070	830
21	21 PCB-189		47	487195		1.03	NO	29.95	1.00	29.92	29.98	53.951	107.9			1885	1871
22	22 PCB-202		54	394246		0.91	NO	26.30	1.00	26.26	26.33	53.518	107.0			1078	792
23	23 PCB-205		45	423558		0.91	NO	31.35	1.00	31.32	31.38	54.268	108.5			2199	1897
24	24 PCB-208		50	391847	3667	0.79	NO	29.71	1.00	29.67	29.74	53.150	106.3			1570	2159
25	25 PCB-206		47	267447		0.78	NO	32.43	1.00	32.40	32.47	54.673	109.3			1570	2159
26	26 PCB-209		44	271960		1.19	NO	33.58	1.00	33.55	33.62	54.244	108.5			183	373
27	27 13C-PCB-31		129	1359174		1.06	NO	15.80	1.26	15.76	15.83	103.802	103.8			39223	11770
28	28 13C-PCB-95		69	559583		1.58	NO	19.11	1.09	19.08	19.15	100.782	100.8			1007	678
29	29 13C-PCB-153		88	741834		1.29	NO	24.21	0.92	24.18	24.25	100.298	100.3			2514	2001
30	30 13C-PCB-28		184	1424795		1.06	NO	15.98	0.94	15.94	16.01	103.034	103.0			39223	11770
31	31 13C-PCB-111		131	776660		1.58	NO	22.04	1.07	22.01	22.08	99.681	99.7			1007	678
32	32 13C-PCB-178		83	623481		1.07	NO	25.08	1.01	25.05	25.12	98.023	98.0			2537	1487
33	33 13C-PCB-1		127	1004654		3.13	NO	8.84	0.75	8.81	8.87	103.118	103.1			1275	8304
34	34 13C-PCB-3		113	905542		3.08	NO	10.39	0.88	10.36	10.42	101.274	101.3			1275	8304
35	35 13C-PCB-4		65	807779		1.61	NO	10.55	0.89	10.52	10.58	98.785	98.8			9743	2528
36	36 13C-PCB-15		100	1268644		1.57	NO	14.24	1.20	14.21	14.28	100.133	100.1			20523	4549
37	37 13C-PCB-19		42	659490		1.10	NO	12.57	1.06	12.54	12.60	94.523	94.5			31329	13390
38	38 13C-PCB-37		185	1428018	138834	1.06	NO	18.20	1.07	18.16	18.23	101.359	101.4			39223	11770

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

**Name: 5-150917B05, Date: 17-Sep-2015, Time: 18:07:06, ID: H5-15-CS3-011, Description: 1668A-CS#3-015, Vial: Tray1:3**

	# Target Analyte	#Hom	Resp	Ion 1 Area	Ion 2 Area	Ra	Ra Fail=YES	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.	Comment	Noise 1	Noise 2
39	39 13C-PCB-54		119	1051363		0.81	NO	14.43	0.85	14.40	14.47	95.685	95.7			3350	1695
40	40 13C-PCB-81		163	1392180		0.79	NO	21.78	1.05	21.75	21.81	100.185	100.2			3800	2359
41	41 13C-PCB-77		180	1534925		0.79	NO	22.08	1.07	22.05	22.11	100.608	100.6			3800	2359
42	42 13C-PCB-104		120	702508		1.60	NO	17.52	0.85	17.49	17.56	96.982	97.0			497	459
43	43 13C-PCB-123		139	822495		1.59	NO	23.09	1.12	23.06	23.12	100.158	100.2			3556	1900
44	44 13C-PCB-118		147	869049		1.59	NO	23.26	1.13	23.23	23.30	100.400	100.4			3556	1900
45	45 13C-PCB-114		139	824149		1.58	NO	23.55	1.14	23.52	23.59	100.539	100.5			3556	1900
46	46 13C-PCB-105		142	842185		1.57	NO	23.89	1.16	23.86	23.92	100.377	100.4			3556	1900
47	47 13C-PCB-126		145	855404		1.60	NO	25.48	1.23	25.44	25.51	101.587	101.6			3556	1900
48	48 13C-PCB-155		134	901810		1.28	NO	20.54	0.99	20.51	20.58	98.657	98.7			556	531
49	49 13C-PCB-167		119	811925		1.30	NO	26.40	1.06	26.37	26.44	98.550	98.6			2514	2001
50	50 13C-PCB-156/157		242	1655819		1.29	NO	27.02	1.09	26.98	27.05	195.739	97.9			2514	2001
51	51 13C-PCB-169		123	841517		1.29	NO	28.66	1.15	28.63	28.69	98.110	98.1			2514	2001
52	52 13C-PCB-188		126	952565		1.08	NO	23.53	0.95	23.50	23.56	97.120	97.1			2537	1487
53	53 13C-PCB-189		135	1027931		1.06	NO	29.94	1.20	29.91	29.97	102.859	102.9			4286	5110
54	54 13C-PCB-202		90	730810		0.92	NO	26.29	1.06	26.25	26.32	95.698	95.7			1242	1146
55	55 13C-PCB-205		138	950018		0.91	NO	31.33	1.01	31.29	31.36	99.009	99.0			4110	3706
56	56 13C-PCB-208		108	796594	3667	0.78	NO	29.70	0.96	29.66	29.73	97.949	97.9			2176	2737
57	57 13C-PCB-206		77	564119		0.79	NO	32.42	1.04	32.39	32.45	97.046	97.0			2176	2737
58	58 13C-PCB-209		103	616508		1.19	NO	33.56	1.08	33.52	33.59	99.309	99.3			238	170
59	59 13C-PCB-9		3262291	1251763		1.61	NO	11.83	0.48	11.80	11.86	120.921	120.9			9743	2528
60	60 13C-PCB-52		1594392	890936		0.79	NO	16.97	0.68	16.94	17.00	121.117	121.1			2189	1690
61	61 13C-PCB-101		1529124	592280		1.58	NO	20.65	0.83	20.62	20.68	122.642	122.6			1007	678
62	62 13C-PCB-138		1565198	679964		1.30	NO	24.87	0.00	24.84	24.91	124.665	124.7			2514	2001
63	63 13C-PCB-194		1308920	689911		0.90	NO	31.06	1.25	31.02	31.09	126.926	126.9			4110	3706

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Name: 5-150917B04, Date: 17-Sep-2015, Time: 17:25:46, ID: H5-15-CS4-011, Description: 1668A-CS#4-015, Vial: Tray1:8

	# Target Analyte	#Hom	Resp	Ion 1 Area	Ion 2 Area	Ra	Ra Fail=YES	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.	Comment	Noise 1	Noise 2
1	1 PCB-1		387	3003478	744666	3.10	NO	8.83	1.00	8.79	8.86	448.134	112.0			1146	636
2	2 PCB-3		411	2909930		3.13	NO	10.37	1.00	10.33	10.40	441.881	110.5			1146	636
3	3 PCB-4		427	2904500		1.55	NO	10.54	1.00	10.50	10.57	434.701	108.7			1062	5150
4	4 PCB-15		414	4228025		1.53	NO	14.22	1.00	14.18	14.25	432.547	108.1			1676	3504
5	5 PCB-19		454	2626812		1.07	NO	12.55	1.00	12.51	12.58	446.750	111.7			772	623
6	6 PCB-37		414	4694283		1.02	NO	18.17	1.00	18.13	18.20	440.594	110.1			1524	1256
7	7 PCB-54		442	3995103		0.80	NO	14.41	1.00	14.37	14.44	443.340	110.8			805	1854
8	8 PCB-81		450	5017699		0.78	NO	21.75	1.00	21.72	21.79	436.044	109.0			1481	4136
9	9 PCB-77		428	5217107		0.78	NO	22.04	1.00	22.01	22.08	425.136	106.3			1481	4136
10	10 PCB-104		503	2912793		1.58	NO	17.49	1.00	17.46	17.53	442.707	110.7			558	509
11	11 PCB-123		417	2721360		1.56	NO	23.07	1.00	23.03	23.10	448.142	112.0			4323	3978
12	12 PCB-118		437	3026702		1.56	NO	23.24	1.00	23.21	23.27	447.160	111.8			4323	3978
13	13 PCB-114		448	2910554		1.57	NO	23.53	1.00	23.50	23.56	444.333	111.1			4323	3978
14	14 PCB-105		432	2888308		1.56	NO	23.87	1.00	23.83	23.90	439.976	110.0			4323	3978
15	15 PCB-126		444	2980409		1.58	NO	25.45	1.00	25.42	25.49	444.813	111.2			4323	3978
16	16 PCB-155		455	3274664		1.27	NO	20.52	1.00	20.48	20.55	445.805	111.5			473	594
17	17 PCB-167		521	3363951		1.25	NO	26.37	1.00	26.33	26.40	444.445	111.1			5122	5807
18	18 PCB-156/157		987	6571507		1.25	NO	26.99	1.00	26.96	27.03	875.330	109.4			5122	5807
19	19 PCB-169		473	3209509		1.26	NO	28.63	1.00	28.59	28.66	444.110	111.0			5122	5807
20	20 PCB-188		431	3307545		1.04	NO	23.50	1.00	23.46	23.53	450.801	112.7			1655	1374
21	21 PCB-189		385	3036775		1.02	NO	29.91	1.00	29.88	29.95	445.041	111.3			6125	4338
22	22 PCB-202		451	2663639		0.91	NO	26.25	1.00	26.22	26.29	448.452	112.1			1487	1489
23	23 PCB-205		371	2730703		0.90	NO	31.30	1.00	31.27	31.33	452.062	113.0			4113	5788
24	24 PCB-208		419	2554236		0.79	NO	29.67	1.00	29.64	29.70	449.530	112.4			2614	3723
25	25 PCB-206		399	1774188		0.79	NO	32.38	1.00	32.35	32.42	462.236	115.6			2614	3723
26	26 PCB-209		366	1736213		1.18	NO	33.53	1.00	33.49	33.56	451.002	112.8			19088	364
27	27 13C-PCB-31		122	1033609		1.06	NO	15.76	1.26	15.73	15.79	97.768	97.8			33744	7838
28	28 13C-PCB-95		67	432840		1.57	NO	19.08	1.09	19.04	19.11	97.898	97.9			814	873
29	29 13C-PCB-153		87	583281		1.28	NO	24.17	0.92	24.13	24.20	99.324	99.3			1775	1830
30	30 13C-PCB-28		177	1086441		1.05	NO	15.94	0.94	15.91	15.97	99.435	99.4			33744	7838
31	31 13C-PCB-111		132	610984		1.58	NO	22.01	1.07	21.98	22.04	100.235	100.2			814	873
32	32 13C-PCB-178		85	486316		1.06	NO	25.05	1.01	25.01	25.08	101.099	101.1			2242	1696
33	33 13C-PCB-1		124	777642	744666	3.10	NO	8.81	0.75	8.78	8.85	100.232	100.2			1531	11459
34	34 13C-PCB-3		114	718145		3.07	NO	10.35	0.88	10.32	10.39	101.423	101.4			1531	11459
35	35 13C-PCB-4		67	660431		1.62	NO	10.53	0.89	10.49	10.56	102.797	102.8			15638	2162
36	36 13C-PCB-15		100	1010429		1.56	NO	14.21	1.20	14.17	14.24	100.727	100.7			27803	3191
37	37 13C-PCB-19		47	576192		1.08	NO	12.53	1.06	12.50	12.57	103.899	103.9			27970	15815
38	38 13C-PCB-37		183	1117962		1.05	NO	18.16	1.07	18.13	18.19	100.536	100.5			33744	7838

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

**Name: 5-150917B04, Date: 17-Sep-2015, Time: 17:25:46, ID: H5-15-CS4-011, Description: 1668A-CS#4-015, Vial: Tray1:8**

	# Target Analyte	#Hom	Resp	Ion 1 Area	Ion 2 Area	Ra	Ra Fail=YES	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.	Comment	Noise 1	Noise 2
39	39 13C-PCB-54		130	901142		0.81	NO	14.40	0.85	14.37	14.43	104.220	104.2			2342	1824
40	40 13C-PCB-81		166	1112790		0.78	NO	21.74	1.05	21.71	21.78	101.893	101.9			3188	2102
41	41 13C-PCB-77		182	1208068		0.79	NO	22.04	1.07	22.00	22.07	101.749	101.7			3188	2102
42	42 13C-PCB-104		125	574945		1.60	NO	17.48	0.85	17.45	17.52	101.721	101.7			503	534
43	43 13C-PCB-123		140	647099		1.58	NO	23.06	1.12	23.02	23.09	100.623	100.6			3167	2480
44	44 13C-PCB-118		148	687554		1.58	NO	23.23	1.13	23.20	23.26	101.363	101.4			3167	2480
45	45 13C-PCB-114		140	645681		1.59	NO	23.52	1.14	23.49	23.55	101.045	101.0			3167	2480
46	46 13C-PCB-105		144	662107		1.59	NO	23.85	1.16	23.82	23.89	101.824	101.8			3167	2480
47	47 13C-PCB-126		145	670689		1.58	NO	25.44	1.23	25.41	25.47	101.502	101.5			3167	2480
48	48 13C-PCB-155		137	716190		1.28	NO	20.51	0.99	20.47	20.54	100.765	100.8			713	737
49	49 13C-PCB-167		124	641338		1.27	NO	26.36	1.06	26.32	26.39	102.227	102.2			1775	1830
50	50 13C-PCB-156/157		255	1313847		1.29	NO	26.98	1.09	26.95	27.01	206.659	103.3			1775	1830
51	51 13C-PCB-169		131	673770		1.28	NO	28.61	1.15	28.58	28.65	103.828	103.8			1775	1830
52	52 13C-PCB-188		133	758663		1.07	NO	23.48	0.95	23.45	23.52	102.495	102.5			2242	1696
53	53 13C-PCB-189		136	775338		1.06	NO	29.90	1.20	29.87	29.94	103.103	103.1			3914	3556
54	54 13C-PCB-202		96	586808		0.93	NO	26.24	1.06	26.21	26.27	102.633	102.6			2087	843
55	55 13C-PCB-205		140	738538		0.90	NO	31.29	1.01	31.26	31.32	100.202	100.2			3160	2292
56	56 13C-PCB-208		109	611531		0.79	NO	29.66	0.96	29.63	29.69	98.949	98.9			2221	2493
57	57 13C-PCB-206		80	446893		0.78	NO	32.37	1.04	32.34	32.40	100.125	100.1			2221	2493
58	58 13C-PCB-209		103	470458		1.20	NO	33.50	1.08	33.46	33.53	99.445	99.4			183	213
59	59 13C-PCB-9		2576737	993430		1.59	NO	11.81	0.48	11.77	11.84	95.510	95.5			15638	2162
60	60 13C-PCB-52		1253336	699244		0.79	NO	16.93	0.68	16.90	16.97	95.209	95.2			2568	1622
61	61 13C-PCB-101		1193255	459741		1.60	NO	20.61	0.83	20.58	20.65	95.704	95.7			814	873
62	62 13C-PCB-138		1175772	513554		1.29	NO	24.84	0.00	24.81	24.87	93.648	93.6			1775	1830
63	63 13C-PCB-194		998710	528450		0.89	NO	31.01	1.25	30.98	31.04	96.845	96.8			3160	2292

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Name: 5-150917B03, Date: 17-Sep-2015, Time: 16:46:19, ID: H5-15-CS5-011, Description: 1668A-CS#5-015, Vial: Tray1:7

	# Target Analyte	#Hom	Resp	Ion 1 Area	Ion 2 Area	Ra	Ra Fail=YES	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.	Comment	Noise 1	Noise 2
1	1 PCB-1		1638	16616557		2.45	YES	8.84	1.00	8.81	8.87	1898.070	94.9			1736	1354
2	2 PCB-3		1846	16520725		2.64	YES	10.38	1.00	10.34	10.41	1983.238	99.2			1736	1354
3	3 PCB-4		2157	16332645		1.55	NO	10.55	1.00	10.52	10.58	2194.273	109.7			1308	4546
4	4 PCB-15		2093	24520996		1.55	NO	14.24	1.00	14.21	14.28	2188.393	109.4			2946	3750
5	5 PCB-19		2289	15392076		1.07	NO	12.57	1.00	12.54	12.60	2254.315	112.7			613	623
6	6 PCB-37		2098	26393218		1.03	NO	18.19	1.00	18.15	18.22	2232.796	111.6			2182	3135
7	7 PCB-54		2237	23089078		0.80	NO	14.43	1.00	14.40	14.47	2245.105	112.3			948	1786
8	8 PCB-81		2290	28191762		0.78	NO	21.77	1.00	21.74	21.80	2217.914	110.9			2420	3012
9	9 PCB-77		2194	28503600		0.78	NO	22.07	1.00	22.04	22.10	2177.914	108.9			2420	3012
10	10 PCB-104		2558	16294651		1.59	NO	17.51	1.00	17.48	17.55	2252.571	112.6			859	636
11	11 PCB-123		2126	15307391		1.56	NO	23.09	1.00	23.06	23.12	2282.941	114.1			13629	11523
12	12 PCB-118		2242	16733872		1.56	NO	23.25	1.00	23.22	23.29	2294.029	114.7			13629	11523
13	13 PCB-114		2282	16249400	33489	1.57	NO	23.55	1.00	23.52	23.59	2261.519	113.1			13629	11523
14	14 PCB-105		2230	16041615		1.57	NO	23.89	1.00	23.86	23.92	2272.181	113.6			13629	11523
15	15 PCB-126		2248	16200313	16878	1.57	NO	25.46	1.00	25.43	25.50	2252.887	112.6			13629	11523
16	16 PCB-155		2314	17791248		1.28	NO	20.53	1.00	20.50	20.57	2266.825	113.3			1037	569
17	17 PCB-167		2627	18310380		1.27	NO	26.39	1.00	26.36	26.42	2241.091	112.1			11347	10948
18	18 PCB-156/157		5006	35911712		1.27	NO	27.00	1.00	26.97	27.04	4439.812	111.0			11347	10948
19	19 PCB-169		2410	17641542		1.27	NO	28.65	1.00	28.62	28.68	2260.906	113.0			11347	10948
20	20 PCB-188		2196	18160238		1.04	NO	23.52	1.00	23.49	23.55	2295.067	114.8			3801	3786
21	21 PCB-189		1978	16336902		1.03	NO	29.93	1.00	29.89	29.96	2286.702	114.3			16465	8171
22	22 PCB-202		2311	14745843		0.91	NO	26.27	1.00	26.24	26.31	2299.648	115.0			5774	2105
23	23 PCB-205		1890	14681780		0.90	NO	31.33	1.00	31.29	31.36	2301.390	115.1			15805	36654
24	24 PCB-208		2133	13895607	41582	0.79	NO	29.68	1.00	29.65	29.72	2288.796	114.4			5789	21635
25	25 PCB-206		2016	9607522		0.79	NO	32.41	1.00	32.37	32.44	2335.408	116.8			5789	21635
26	26 PCB-209		1857	9225856		1.18	NO	33.54	1.00	33.51	33.57	2287.648	114.4			283	408
27	27 13C-PCB-31		115	1108530		1.04	NO	15.78	1.26	15.75	15.81	92.463	92.5			35142	12210
28	28 13C-PCB-95		67	463303		1.60	NO	19.10	1.09	19.06	19.13	96.907	96.9			1242	729
29	29 13C-PCB-153		85	614478		1.29	NO	24.19	0.92	24.16	24.22	97.167	97.2			1885	1614
30	30 13C-PCB-28		172	1159568		1.05	NO	15.96	0.94	15.92	15.99	96.431	96.4			35142	12210
31	31 13C-PCB-111		131	658493		1.60	NO	22.03	1.07	21.99	22.06	99.824	99.8			1242	729
32	32 13C-PCB-178		85	522904		1.06	NO	25.06	1.01	25.03	25.09	100.715	100.7			2721	1331
33	33 13C-PCB-1		122	850591		3.12	NO	8.83	0.75	8.79	8.86	98.974	99.0			1668	10099
34	34 13C-PCB-3		113	801575		3.06	NO	10.37	0.88	10.33	10.40	101.407	101.4			1668	10099
35	35 13C-PCB-4		67	736935		1.62	NO	10.54	0.89	10.50	10.57	103.174	103.2			12974	2796
36	36 13C-PCB-15		104	1161944		1.57	NO	14.22	1.20	14.19	14.26	104.410	104.4			26238	3684
37	37 13C-PCB-19		48	667744		1.08	NO	12.55	1.06	12.51	12.58	108.136	108.1			29066	19067
38	38 13C-PCB-37		185	1243982		1.05	NO	18.18	1.07	18.14	18.21	101.321	101.3			35142	12210

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

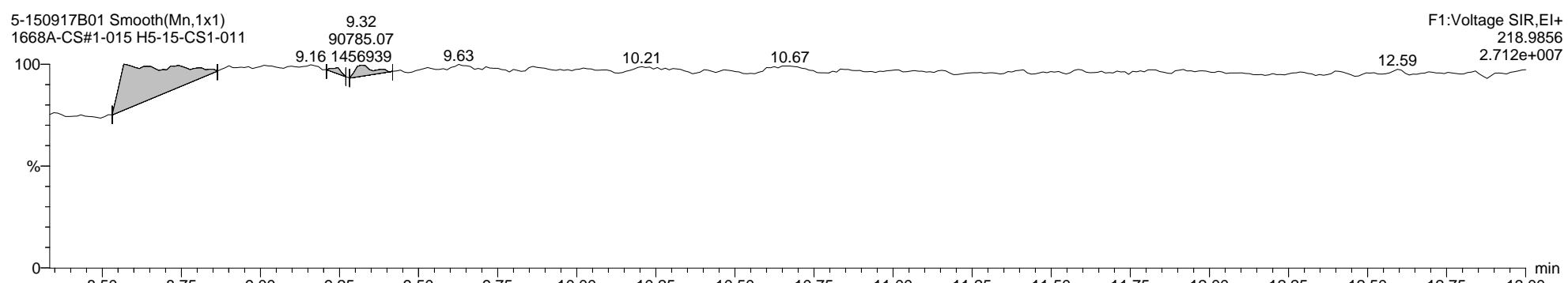
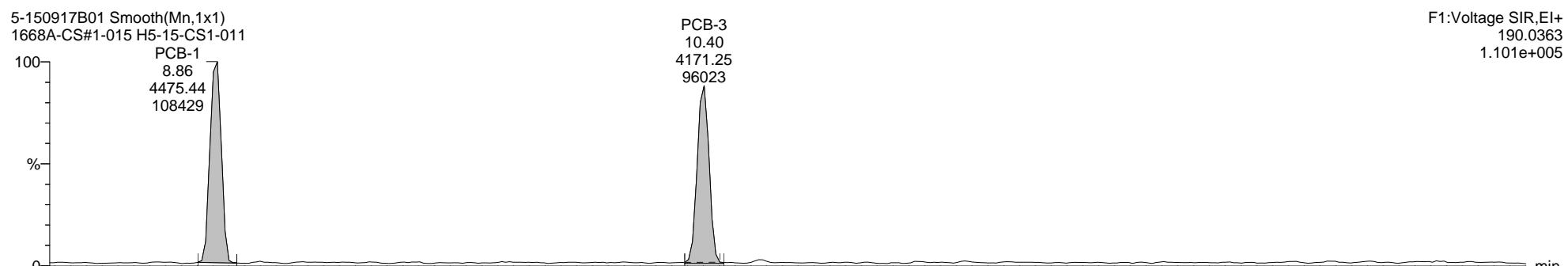
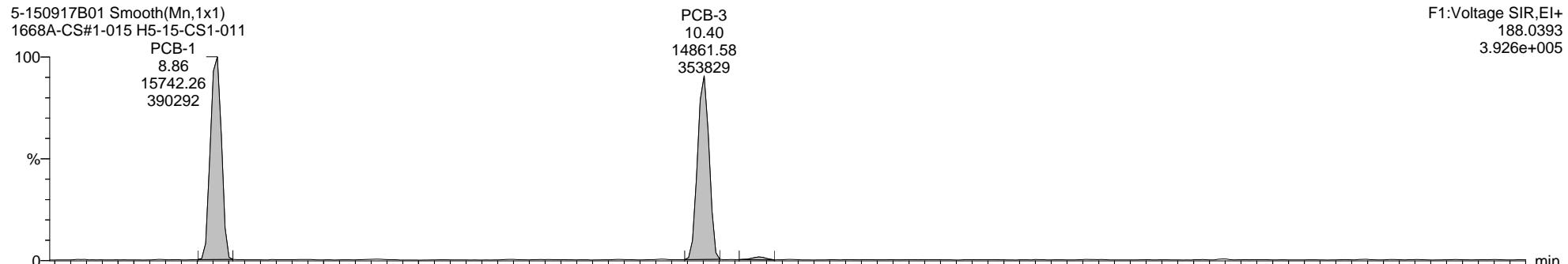
**Name: 5-150917B03, Date: 17-Sep-2015, Time: 16:46:19, ID: H5-15-CS5-011, Description: 1668A-CS#5-015, Vial: Tray1:7**

	# Target Analyte	#Hom	Resp	Ion 1 Area	Ion 2 Area	Ra	Ra Fail=YES	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.	Comment	Noise 1	Noise 2
39	39 13C-PCB-54		135	1031624		0.81	NO	14.42	0.85	14.38	14.45	108.183	108.2			4211	2289
40	40 13C-PCB-81		168	1227688		0.78	NO	21.76	1.05	21.73	21.80	103.294	103.3			3389	2077
41	41 13C-PCB-77		178	1293724		0.79	NO	22.05	1.07	22.02	22.09	99.764	99.8			3389	2077
42	42 13C-PCB-104		127	633324		1.60	NO	17.50	0.85	17.47	17.54	102.805	102.8			516	725
43	43 13C-PCB-123		142	712440		1.59	NO	23.08	1.12	23.05	23.11	102.057	102.1			3683	3327
44	44 13C-PCB-118		147	738613		1.59	NO	23.24	1.13	23.21	23.27	100.476	100.5			3683	3327
45	45 13C-PCB-114		141	704220		1.60	NO	23.54	1.14	23.51	23.58	101.583	101.6			3683	3327
46	46 13C-PCB-105		142	715208		1.58	NO	23.88	1.16	23.84	23.91	100.601	100.6			3683	3327
47	47 13C-PCB-126		143	717058	16878	1.59	NO	25.45	1.23	25.42	25.49	99.741	99.7			3683	3327
48	48 13C-PCB-155		135	769988		1.27	NO	20.53	0.99	20.49	20.56	98.904	98.9			694	523
49	49 13C-PCB-167		124	695875		1.27	NO	26.38	1.06	26.35	26.41	102.939	102.9			1885	1614
50	50 13C-PCB-156/157		257	1427110		1.29	NO	26.99	1.09	26.96	27.03	207.949	104.0			1885	1614
51	51 13C-PCB-169		131	726155		1.29	NO	28.64	1.15	28.60	28.67	103.951	104.0			1885	1614
52	52 13C-PCB-188		133	816748		1.07	NO	23.51	0.95	23.47	23.54	102.284	102.3			2721	1331
53	53 13C-PCB-189		132	811634		1.06	NO	29.91	1.20	29.88	29.95	100.375	100.4			4010	3097
54	54 13C-PCB-202		96	637855		0.91	NO	26.26	1.06	26.23	26.30	102.546	102.5			1163	1319
55	55 13C-PCB-205		144	776666		0.90	NO	31.31	1.01	31.28	31.35	102.779	102.8			3923	3341
56	56 13C-PCB-208		114	656898	41582	0.78	NO	29.67	0.96	29.64	29.70	102.971	103.0			2674	4693
57	57 13C-PCB-206		83	479999		0.78	NO	32.38	1.04	32.35	32.42	104.367	104.4			2674	4693
58	58 13C-PCB-209		106	496259		1.18	NO	33.53	1.08	33.49	33.56	101.546	101.5			249	181
59	59 13C-PCB-9		2868490	1100217		1.61	NO	11.82	0.48	11.79	11.85	106.325	106.3			12974	2796
60	60 13C-PCB-52		1381943	770786		0.79	NO	16.95	0.68	16.92	16.98	104.978	105.0			2454	1879
61	61 13C-PCB-101		1300595	501815		1.59	NO	20.63	0.83	20.60	20.66	104.313	104.3			1242	729
62	62 13C-PCB-138		1269528	559728		1.27	NO	24.85	0.00	24.82	24.88	101.116	101.1			1885	1614
63	63 13C-PCB-194		1026748	541404		0.90	NO	31.03	1.25	31.00	31.07	99.564	99.6			3923	3341

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

**Method:** C:\MassLynx\PCB.PRO\MethDB\1668-OCTYL-1-ICAL.mdb 11 Nov 2015 18:20:52**Calibration:** C:\MassLynx\PCB.PRO\CurveDB\5-150917B-CAL5-1668OCTYL.cdb 11 Nov 2015 18:43:37**Name:** 5-150917B01, **Date:** 17-Sep-2015, **Time:** 15:09:57, **ID:** H5-15-CS1-011, **Description:** 1668A-CS#1-015, **Vial:** Tray1:5**PCB-1**

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

**Name: 5-150917B01, Date: 17-Sep-2015, Time: 15:09:57, ID: H5-15-CS1-011, Description: 1668A-CS#1-015, Vial: Tray1:5****13C-PCB-1**

5-150917B01 Smooth(Mn,1x1)

1668A-CS#1-015 H5-15-CS1-011

13C-PCB-1

8.85  
2115917.00  
52666360

13C-PCB-3

10.39

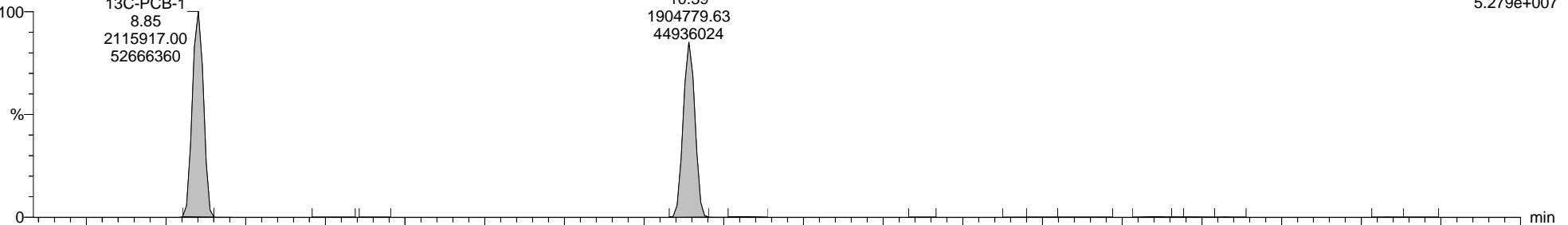
1904779.63

44936024

F1:Voltage SIR,EI+

200.0795

5.279e+007



5-150917B01 Smooth(Mn,1x1)

1668A-CS#1-015 H5-15-CS1-011

13C-PCB-1

8.85  
679178.75  
16901356

13C-PCB-3

10.39

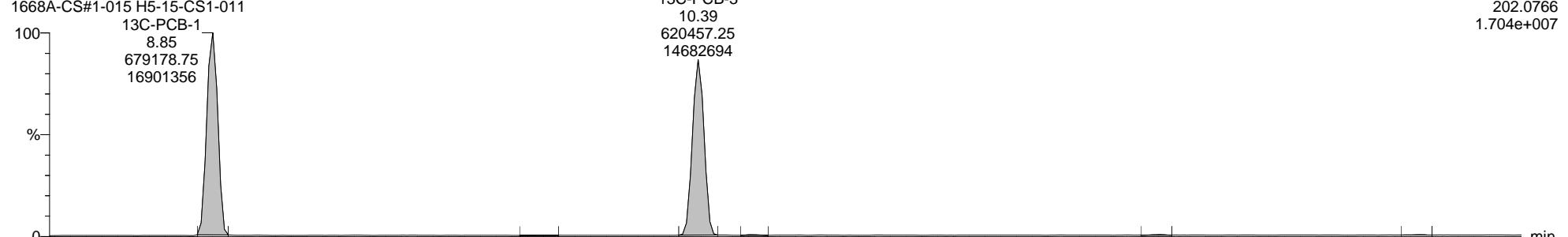
620457.25

14682694

F1:Voltage SIR,EI+

202.0766

1.704e+007



5-150917B01 Smooth(Mn,1x1)

1668A-CS#1-015 H5-15-CS1-011

13C-PCB-1

9.32  
9.16 1456939  
9.63

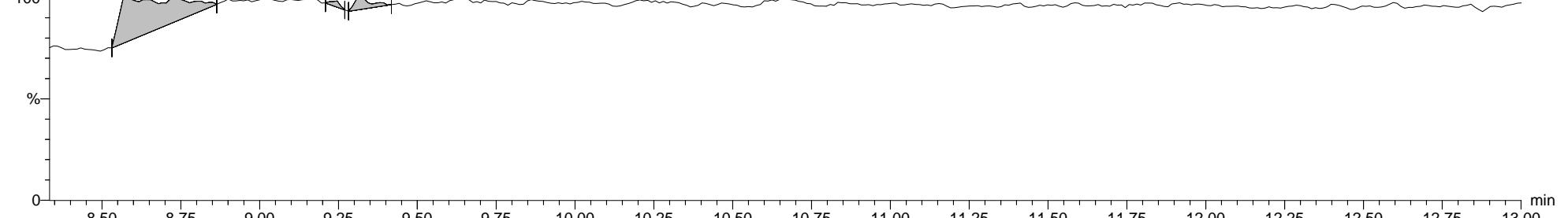
10.21

10.67

F1:Voltage SIR,EI+

218.9856

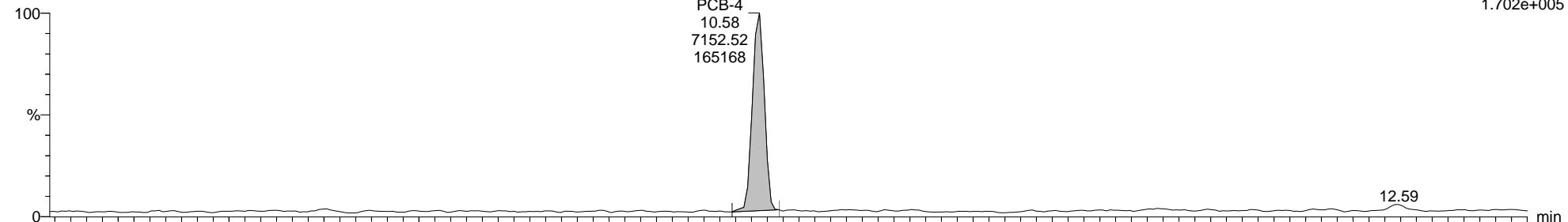
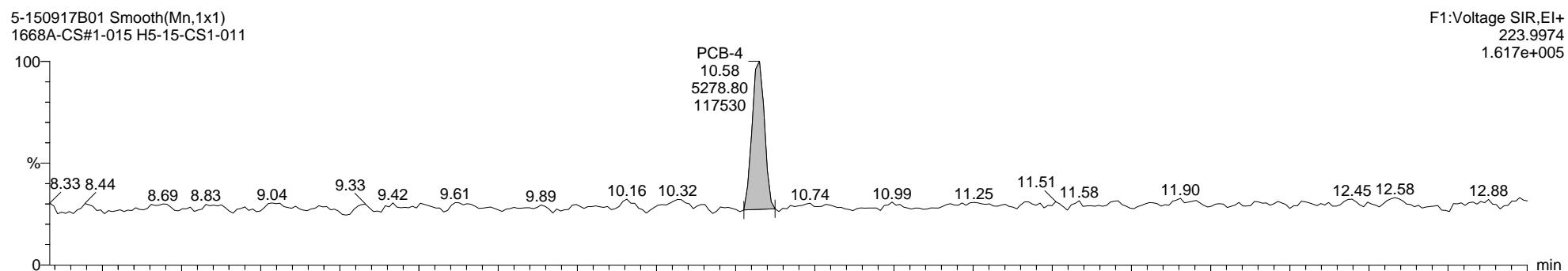
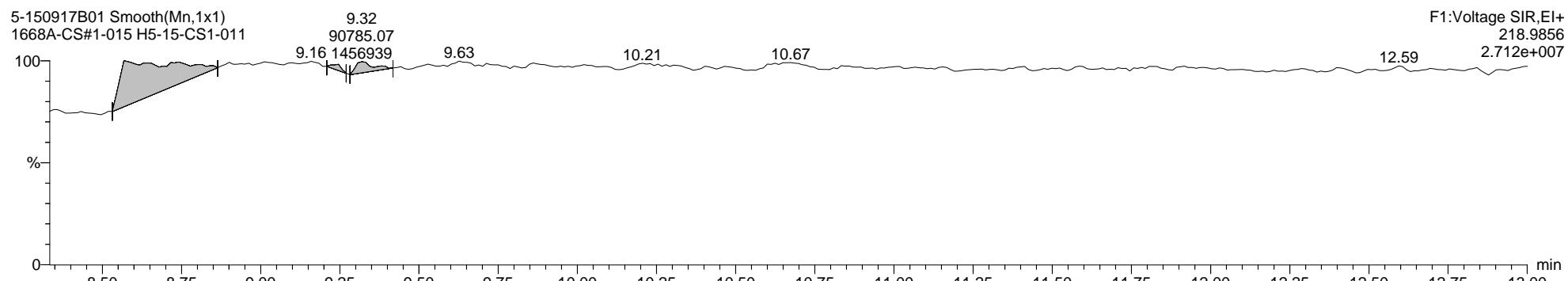
2.712e+007



Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

**Name: 5-150917B01, Date: 17-Sep-2015, Time: 15:09:57, ID: H5-15-CS1-011, Description: 1668A-CS#1-015, Vial: Tray1:5****PCB-4**5-150917B01 Smooth(Mn,1x1)  
1668A-CS#1-015 H5-15-CS1-0115-150917B01 Smooth(Mn,1x1)  
1668A-CS#1-015 H5-15-CS1-0115-150917B01 Smooth(Mn,1x1)  
1668A-CS#1-015 H5-15-CS1-011

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

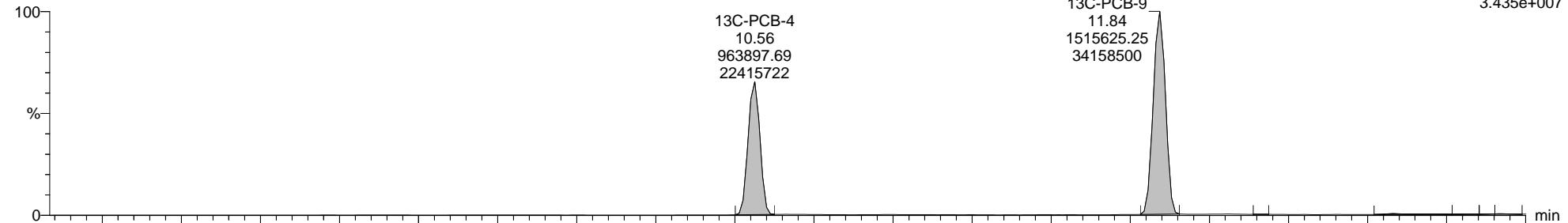
Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

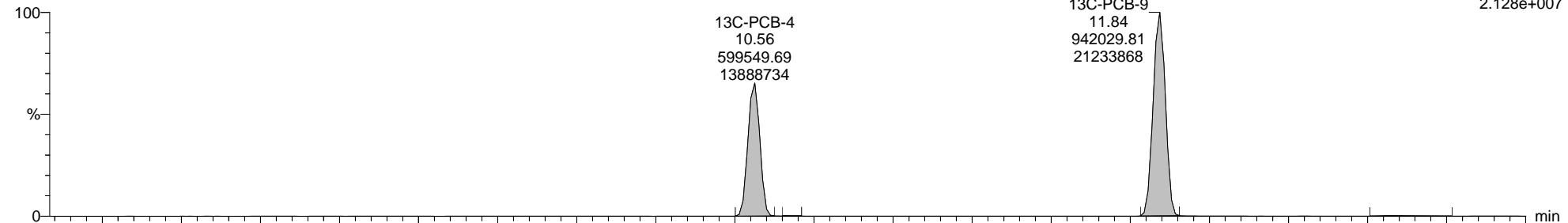
Name: 5-150917B01, Date: 17-Sep-2015, Time: 15:09:57, ID: H5-15-CS1-011, Description: 1668A-CS#1-015, Vial: Tray1:5

13C-PCB-4

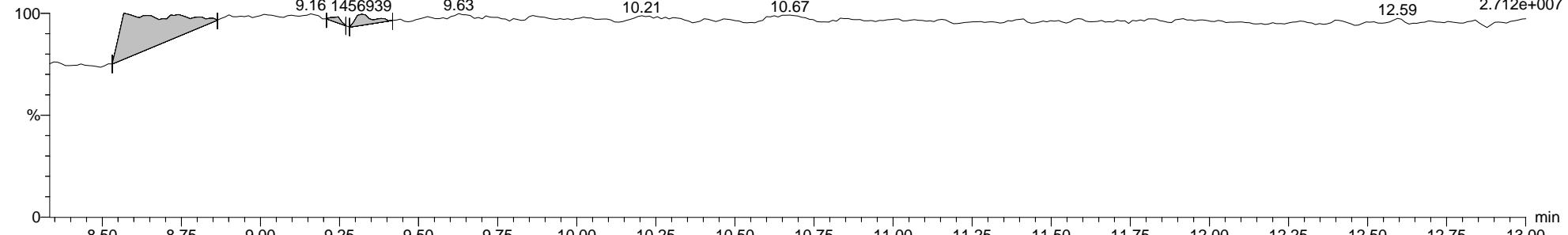
5-150917B01 Smooth(Mn,1x1)  
1668A-CS#1-015 H5-15-CS1-011



5-150917B01 Smooth(Mn,1x1)  
1668A-CS#1-015 H5-15-CS1-011



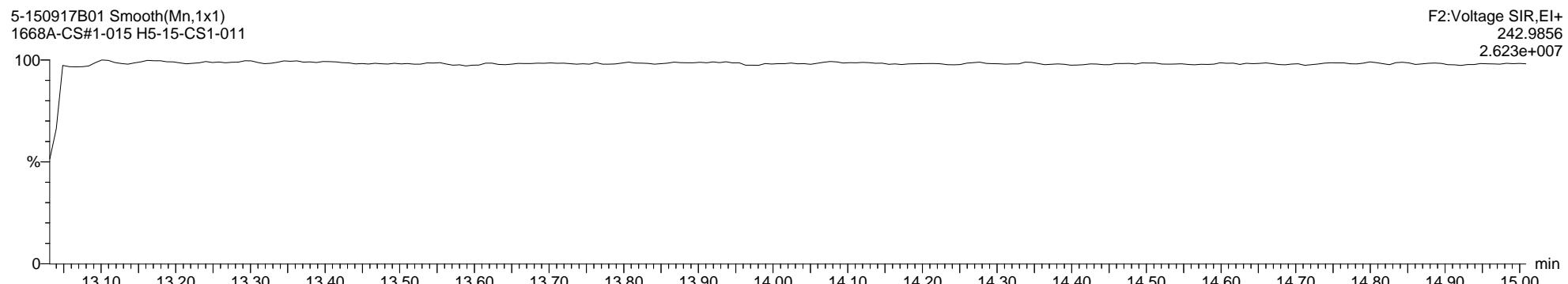
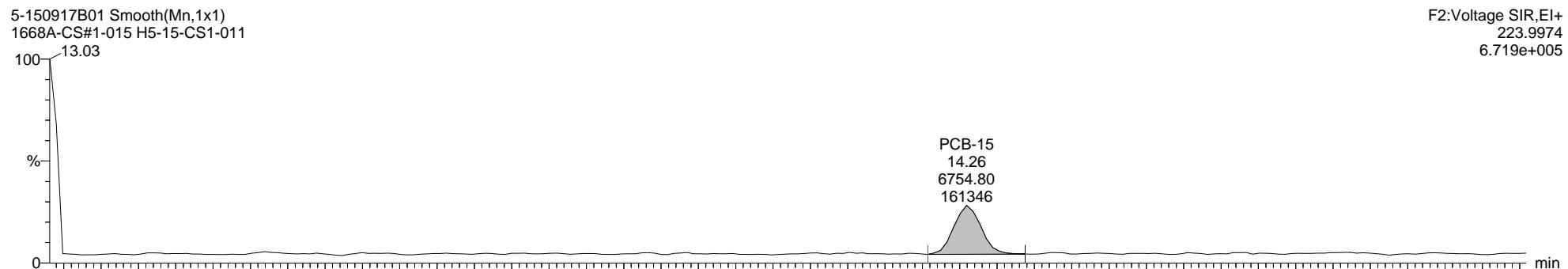
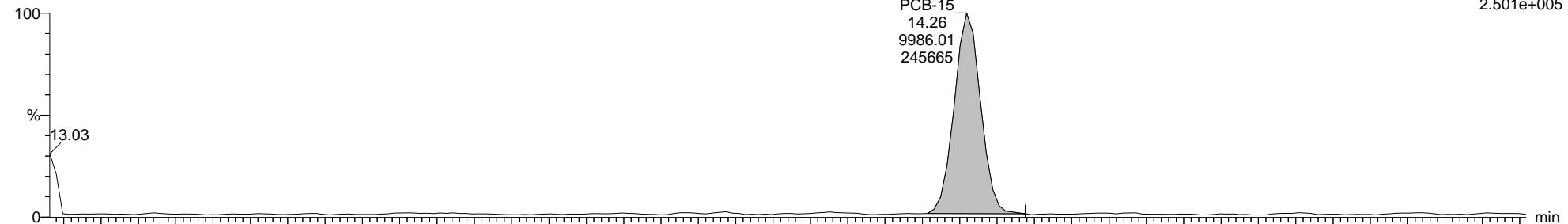
5-150917B01 Smooth(Mn,1x1)  
1668A-CS#1-015 H5-15-CS1-011



Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

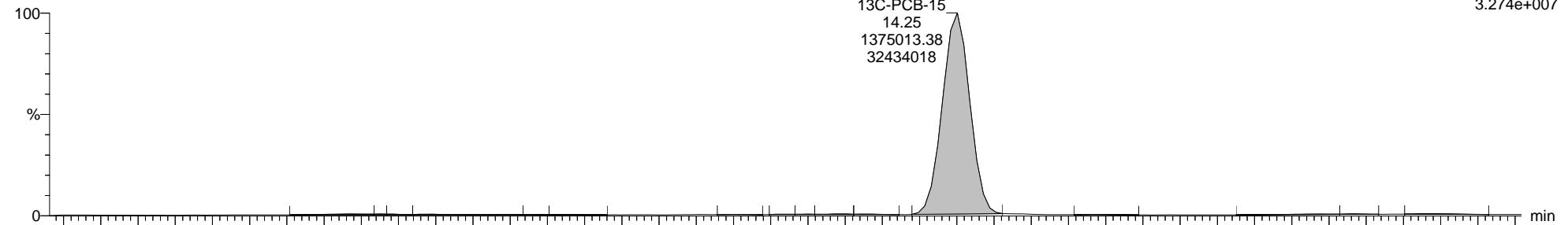
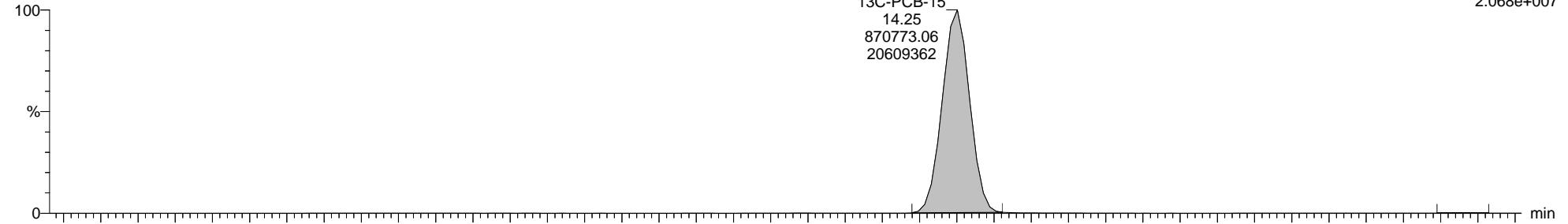
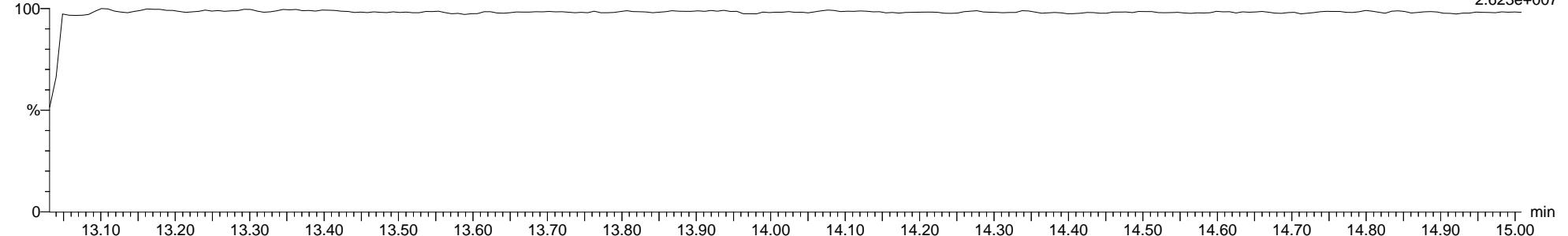
Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

**Name: 5-150917B01, Date: 17-Sep-2015, Time: 15:09:57, ID: H5-15-CS1-011, Description: 1668A-CS#1-015, Vial: Tray1:5****PCB-15**5-150917B01 Smooth(Mn,1x1)  
1668A-CS#1-015 H5-15-CS1-011

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

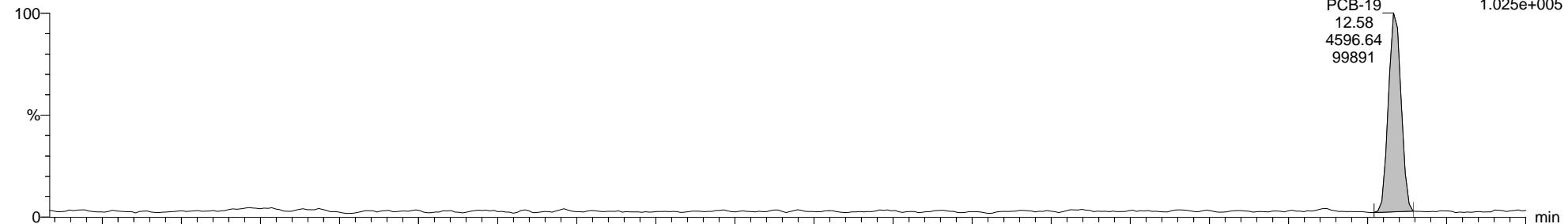
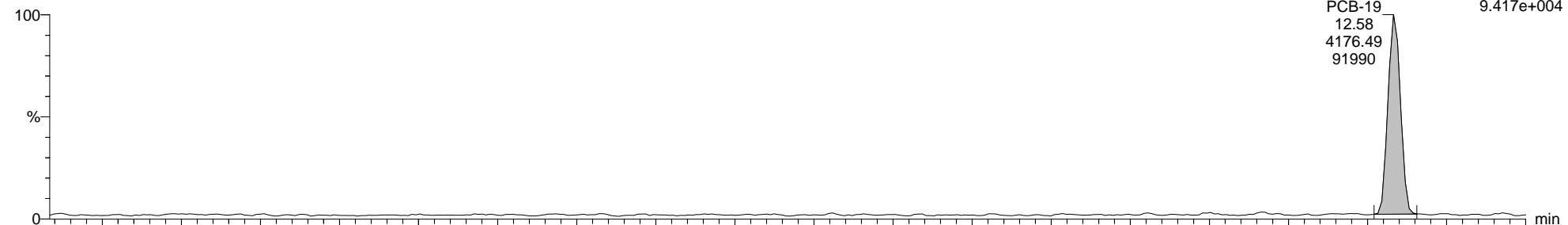
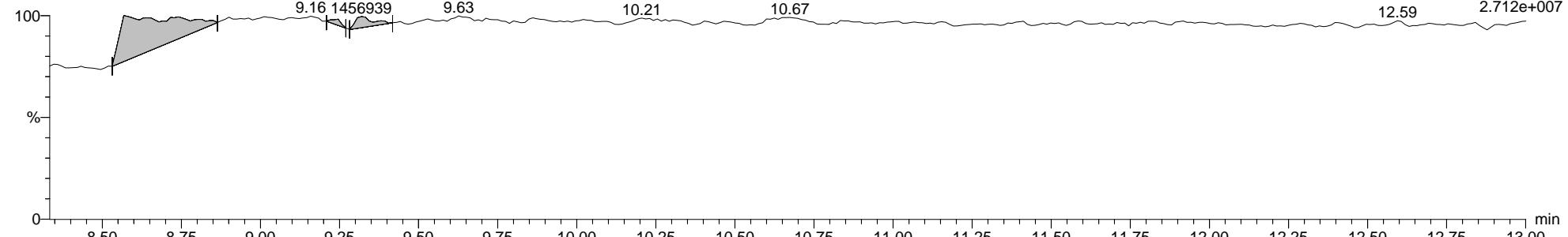
**Name: 5-150917B01, Date: 17-Sep-2015, Time: 15:09:57, ID: H5-15-CS1-011, Description: 1668A-CS#1-015, Vial: Tray1:5****13C-PCB-15**5-150917B01 Smooth(Mn,1x1)  
1668A-CS#1-015 H5-15-CS1-011F2:Voltage SIR,EI+  
234.0406  
3.274e+0075-150917B01 Smooth(Mn,1x1)  
1668A-CS#1-015 H5-15-CS1-011F2:Voltage SIR,EI+  
236.0376  
2.068e+0075-150917B01 Smooth(Mn,1x1)  
1668A-CS#1-015 H5-15-CS1-011F2:Voltage SIR,EI+  
242.9856  
2.623e+007

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Name: 5-150917B01, Date: 17-Sep-2015, Time: 15:09:57, ID: H5-15-CS1-011, Description: 1668A-CS#1-015, Vial: Tray1:5

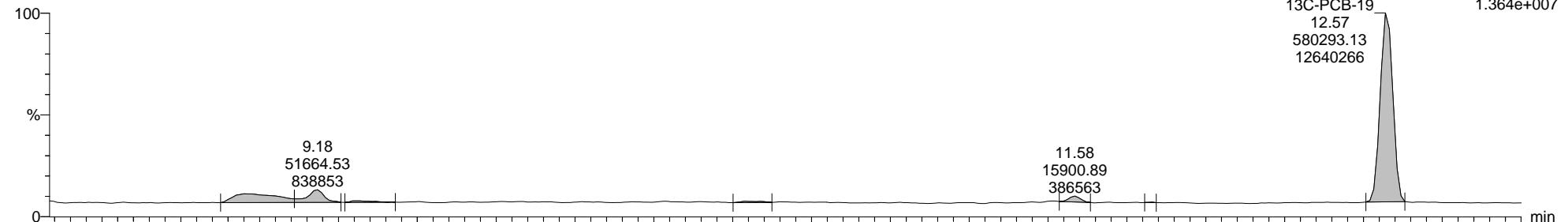
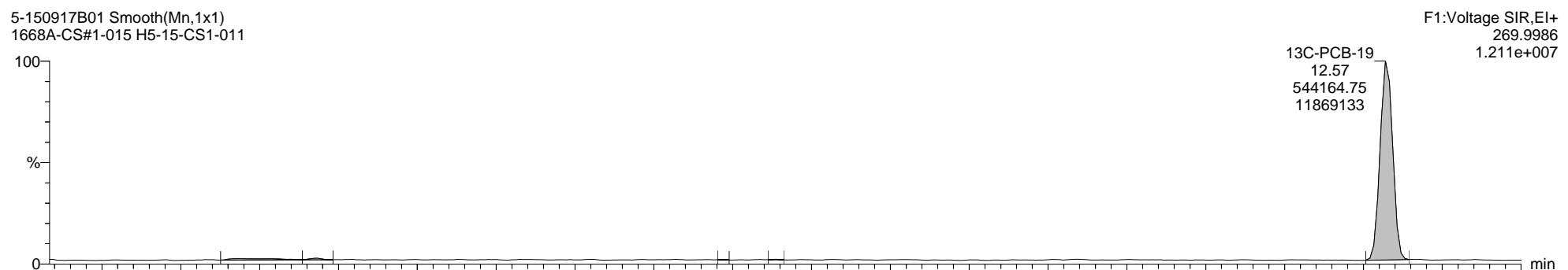
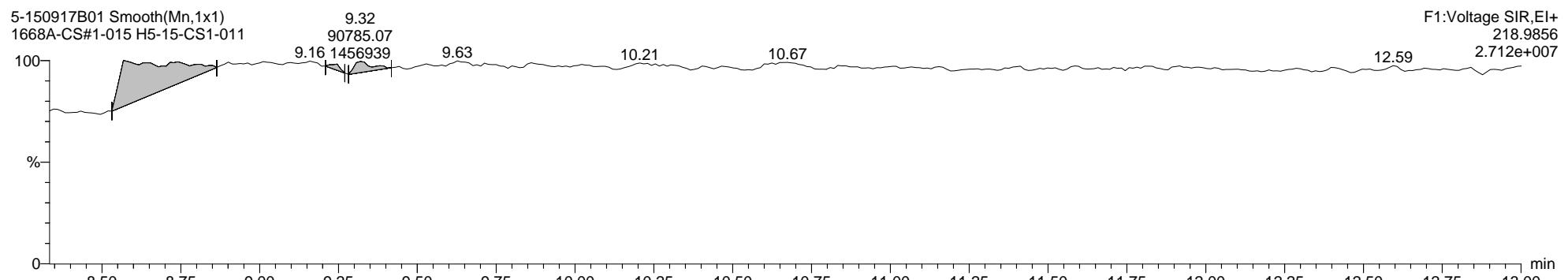
**PCB-19**5-150917B01 Smooth(Mn,1x1)  
1668A-CS#1-015 H5-15-CS1-0115-150917B01 Smooth(Mn,1x1)  
1668A-CS#1-015 H5-15-CS1-0115-150917B01 Smooth(Mn,1x1)  
1668A-CS#1-015 H5-15-CS1-011

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Name: 5-150917B01, Date: 17-Sep-2015, Time: 15:09:57, ID: H5-15-CS1-011, Description: 1668A-CS#1-015, Vial: Tray1:5

**13C-PCB-19**5-150917B01 Smooth(Mn,1x1)  
1668A-CS#1-015 H5-15-CS1-0115-150917B01 Smooth(Mn,1x1)  
1668A-CS#1-015 H5-15-CS1-0115-150917B01 Smooth(Mn,1x1)  
1668A-CS#1-015 H5-15-CS1-011

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

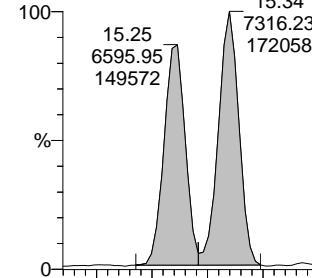
Name: 5-150917B01, Date: 17-Sep-2015, Time: 15:09:57, ID: H5-15-CS1-011, Description: 1668A-CS#1-015, Vial: Tray1:5

**PCB-37**

5-150917B01 Smooth(Mn,1x1)

1668A-CS#1-015 H5-15-CS1-011

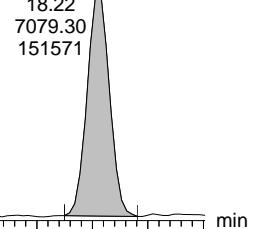
15.34

15.25  
6595.95  
1495727316.23  
172058

F3:Voltage SIR,EI+

255.9613

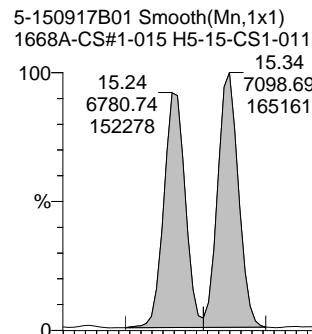
1.750e+005

PCB-37  
18.22  
7079.30  
151571

5-150917B01 Smooth(Mn,1x1)

1668A-CS#1-015 H5-15-CS1-011

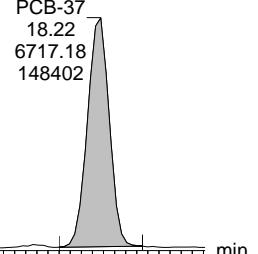
15.34

15.24  
6780.74  
1522787098.69  
165161

F3:Voltage SIR,EI+

257.9584

1.672e+005



5-150917B01 Smooth(Mn,1x1)

1668A-CS#1-015 H5-15-CS1-011

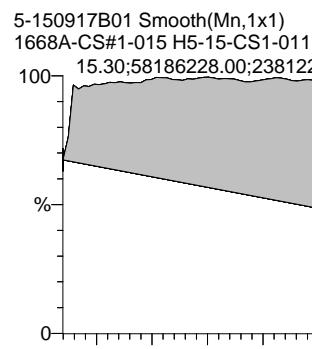
15.30;58186228.00;23812212

17.18  
38019212.00  
38062876

F3:Voltage SIR,EI+

280.9825

5.569e+007

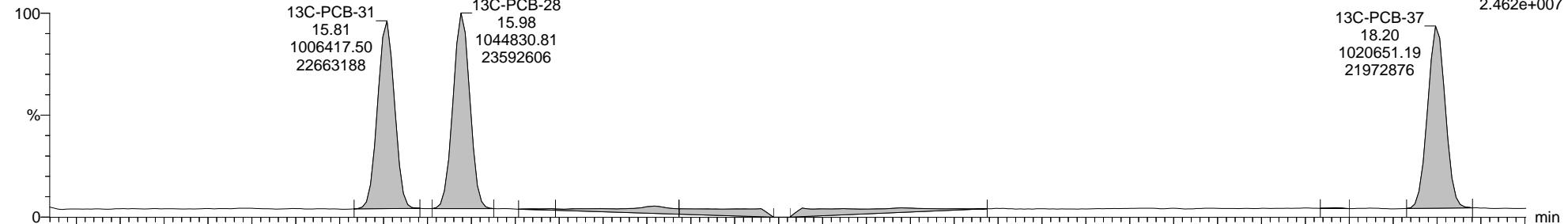
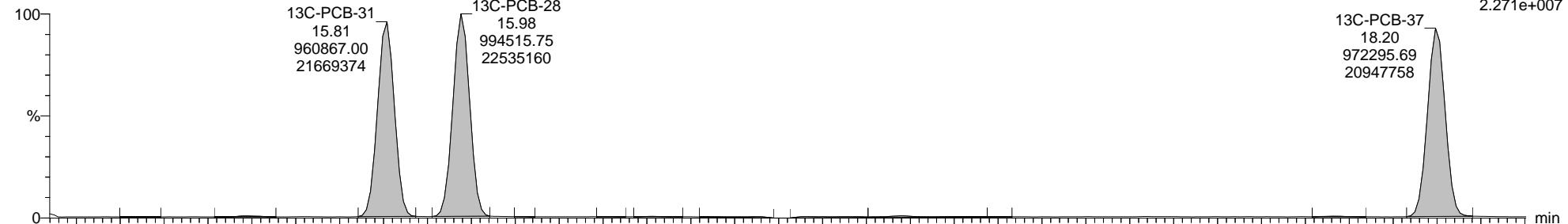
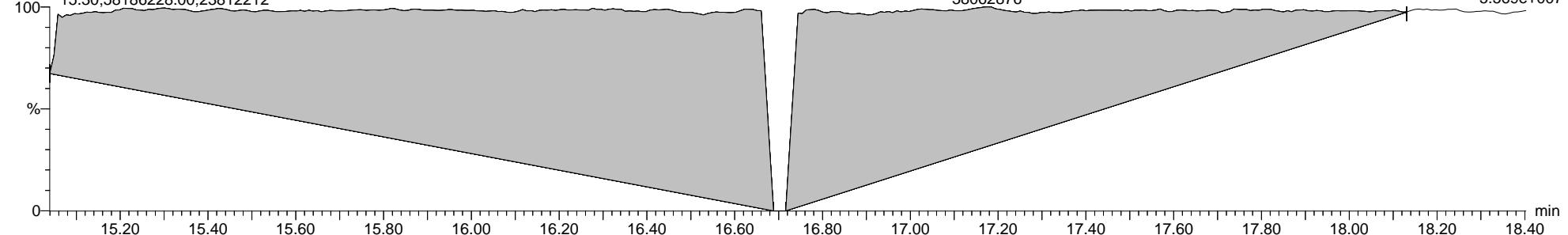


Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

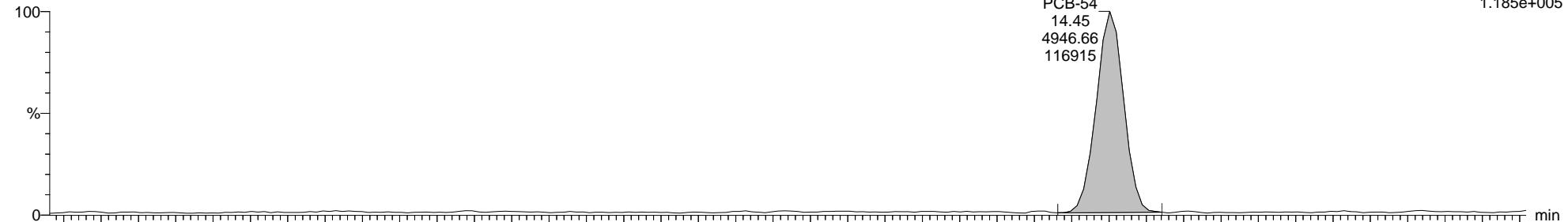
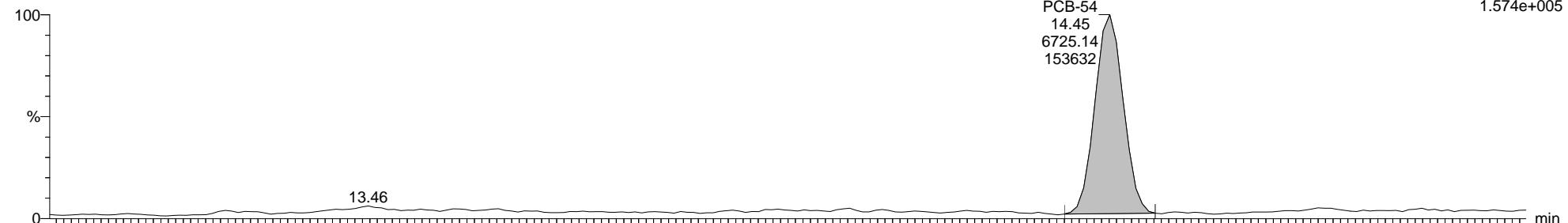
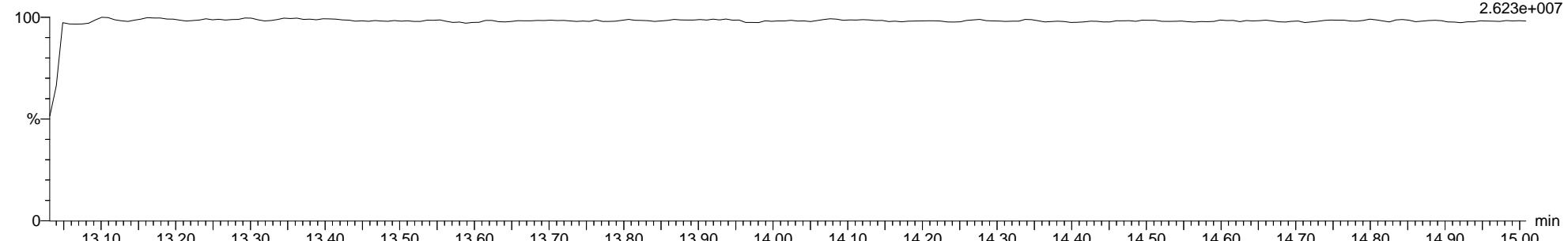
Name: 5-150917B01, Date: 17-Sep-2015, Time: 15:09:57, ID: H5-15-CS1-011, Description: 1668A-CS#1-015, Vial: Tray1:5

**13C-PCB-37**5-150917B01 Smooth(Mn,1x1)  
1668A-CS#1-015 H5-15-CS1-0115-150917B01 Smooth(Mn,1x1)  
1668A-CS#1-015 H5-15-CS1-0115-150917B01 Smooth(Mn,1x1)  
1668A-CS#1-015 H5-15-CS1-011  
15.30;58186228.00;23812212

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

**Name: 5-150917B01, Date: 17-Sep-2015, Time: 15:09:57, ID: H5-15-CS1-011, Description: 1668A-CS#1-015, Vial: Tray1:5****PCB-54**5-150917B01 Smooth(Mn,1x1)  
1668A-CS#1-015 H5-15-CS1-0115-150917B01 Smooth(Mn,1x1)  
1668A-CS#1-015 H5-15-CS1-0115-150917B01 Smooth(Mn,1x1)  
1668A-CS#1-015 H5-15-CS1-011

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Name: 5-150917B01, Date: 17-Sep-2015, Time: 15:09:57, ID: H5-15-CS1-011, Description: 1668A-CS#1-015, Vial: Tray1:5

### 13C-PCB-54

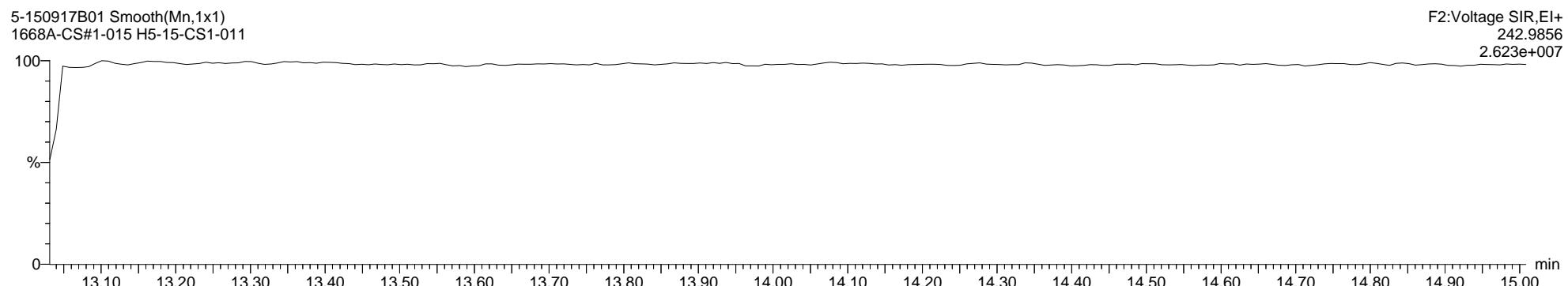
5-150917B01 Smooth(Mn,1x1)  
1668A-CS#1-015 H5-15-CS1-011



5-150917B01 Smooth(Mn,1x1)  
1668A-CS#1-015 H5-15-CS1-011



5-150917B01 Smooth(Mn,1x1)  
1668A-CS#1-015 H5-15-CS1-011

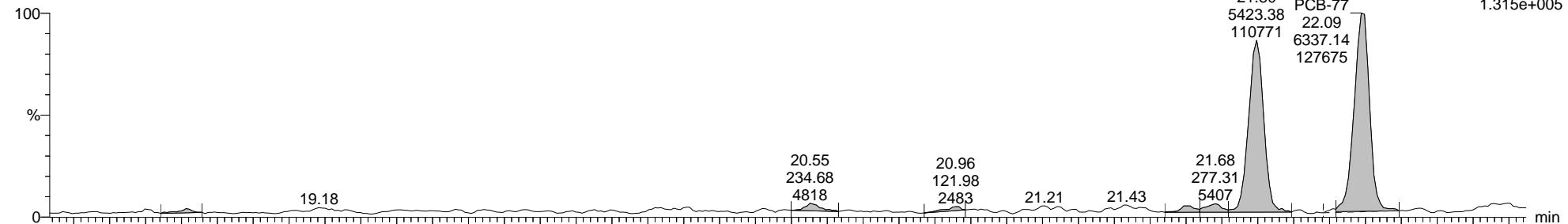
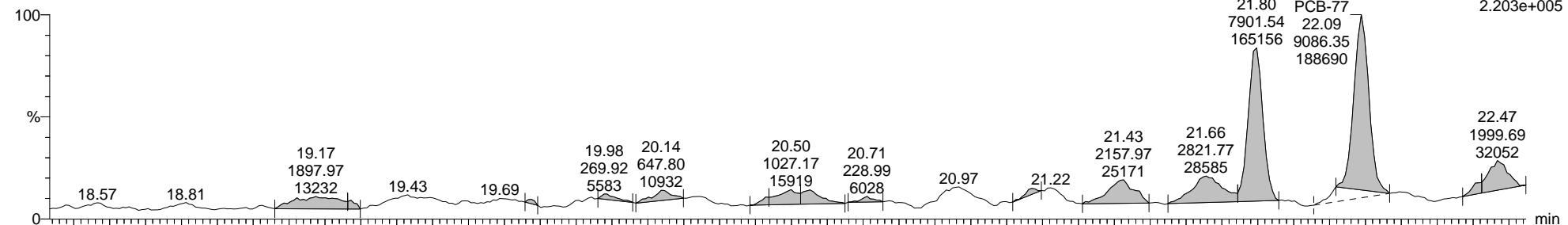
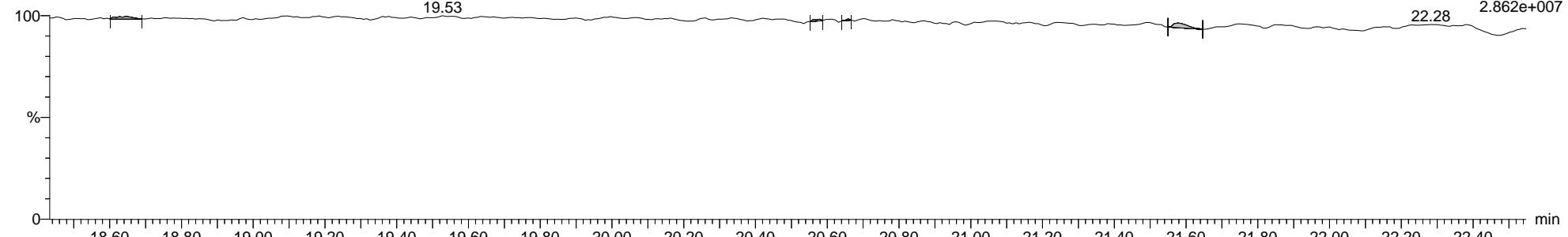


Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Name: 5-150917B01, Date: 17-Sep-2015, Time: 15:09:57, ID: H5-15-CS1-011, Description: 1668A-CS#1-015, Vial: Tray1:5

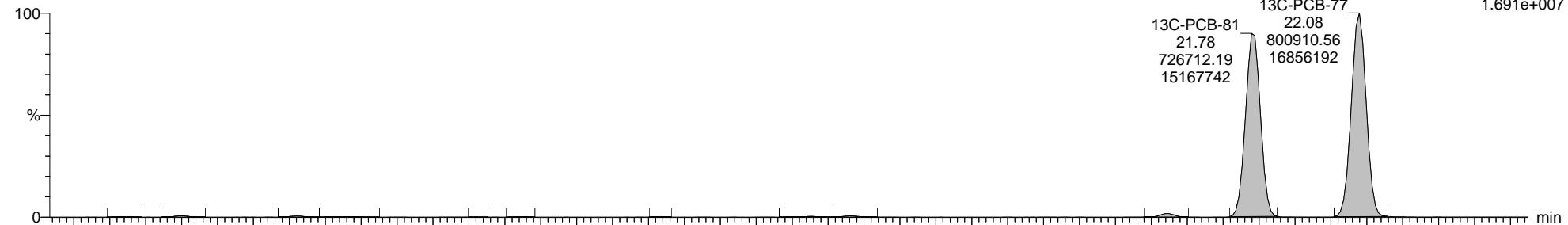
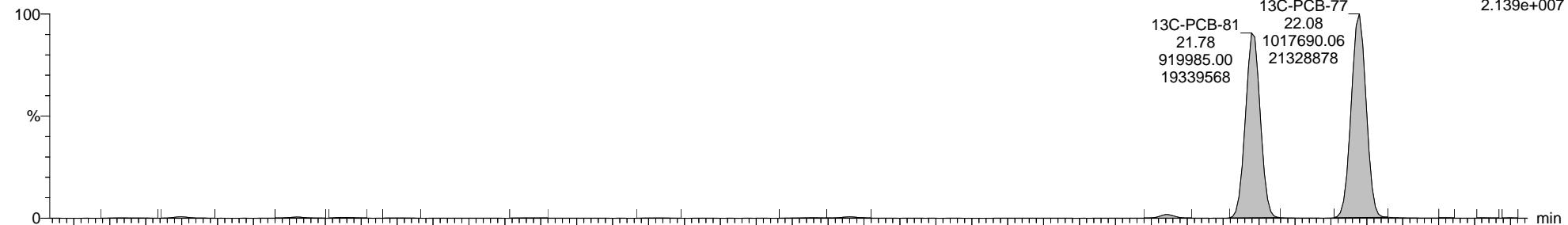
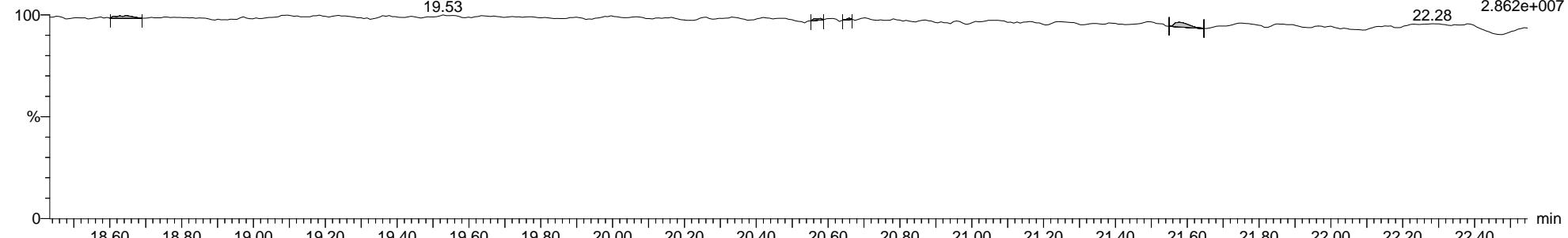
**PCB-81**5-150917B01 Smooth(Mn,1x1)  
1668A-CS#1-015 H5-15-CS1-011F4:Voltage SIR,EI+  
289.9224  
1.315e+0055-150917B01 Smooth(Mn,1x1)  
1668A-CS#1-015 H5-15-CS1-011F4:Voltage SIR,EI+  
291.9194  
2.203e+0055-150917B01 Smooth(Mn,1x1)  
1668A-CS#1-015 H5-15-CS1-011F4:Voltage SIR,EI+  
330.9792  
2.862e+007

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

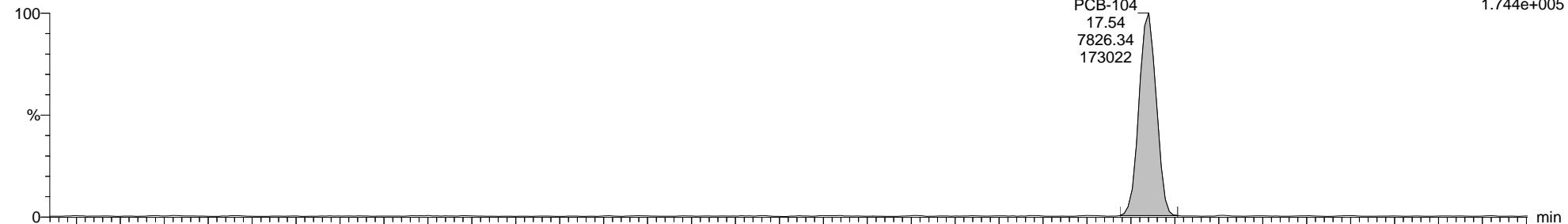
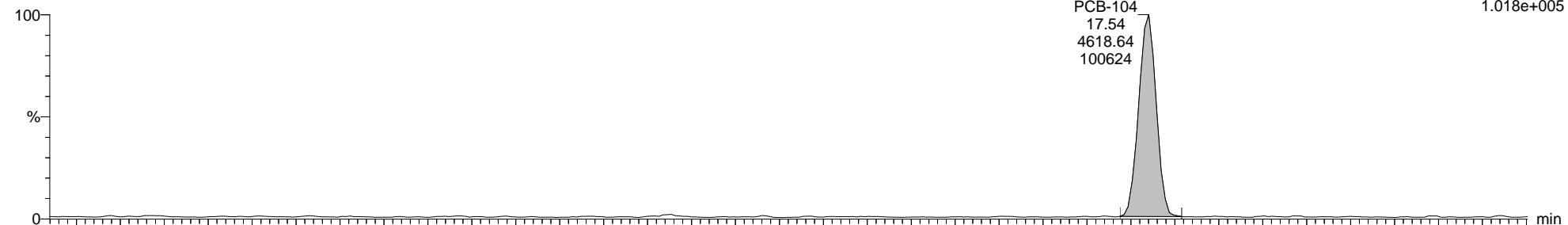
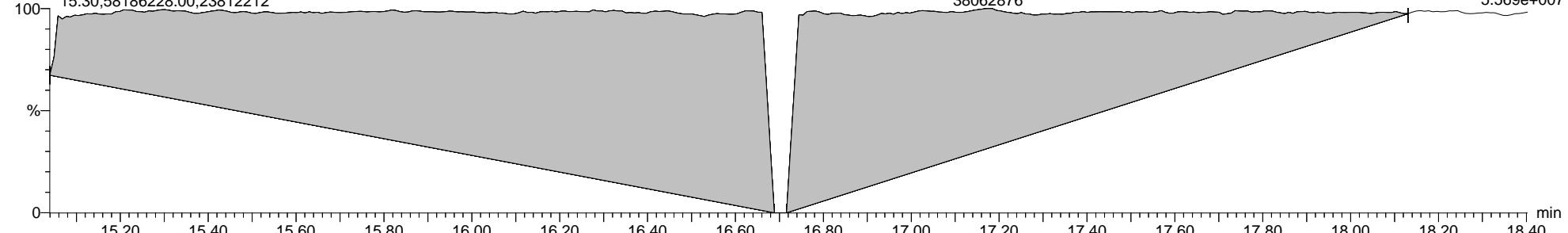
Name: 5-150917B01, Date: 17-Sep-2015, Time: 15:09:57, ID: H5-15-CS1-011, Description: 1668A-CS#1-015, Vial: Tray1:5

**13C-PCB-81**5-150917B01 Smooth(Mn,1x1)  
1668A-CS#1-015 H5-15-CS1-0115-150917B01 Smooth(Mn,1x1)  
1668A-CS#1-015 H5-15-CS1-0115-150917B01 Smooth(Mn,1x1)  
1668A-CS#1-015 H5-15-CS1-011

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

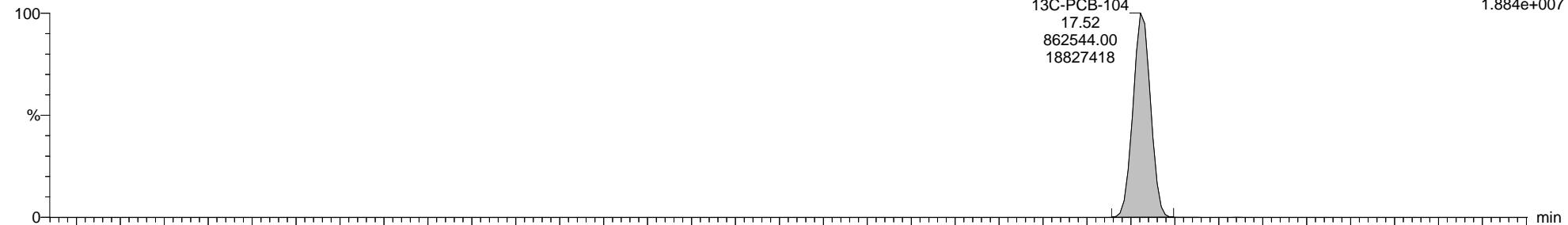
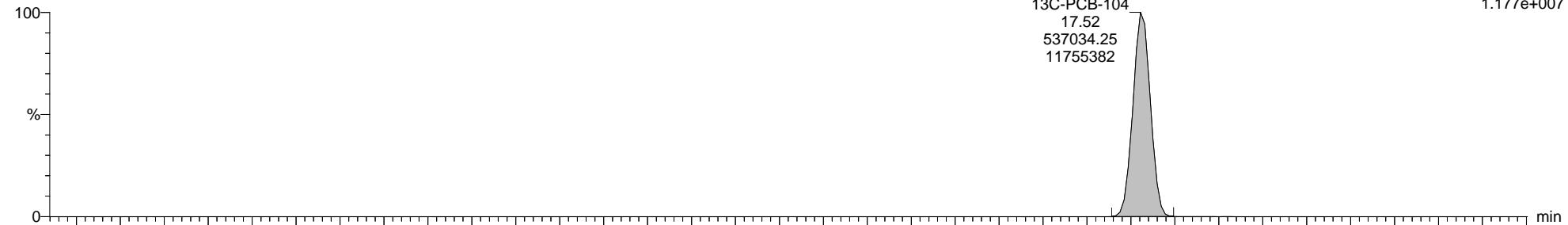
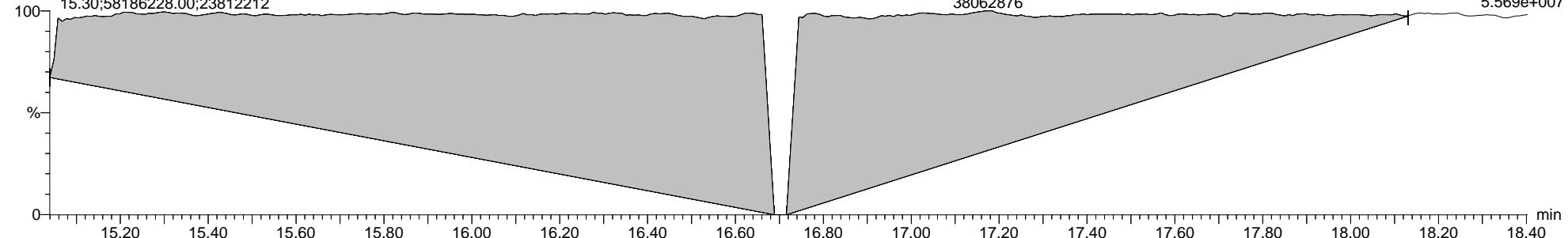
Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

**Name: 5-150917B01, Date: 17-Sep-2015, Time: 15:09:57, ID: H5-15-CS1-011, Description: 1668A-CS#1-015, Vial: Tray1:5****PCB-104**5-150917B01 Smooth(Mn,1x1)  
1668A-CS#1-015 H5-15-CS1-0115-150917B01 Smooth(Mn,1x1)  
1668A-CS#1-015 H5-15-CS1-0115-150917B01 Smooth(Mn,1x1)  
1668A-CS#1-015 H5-15-CS1-011  
15.30;58186228.00;23812212

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

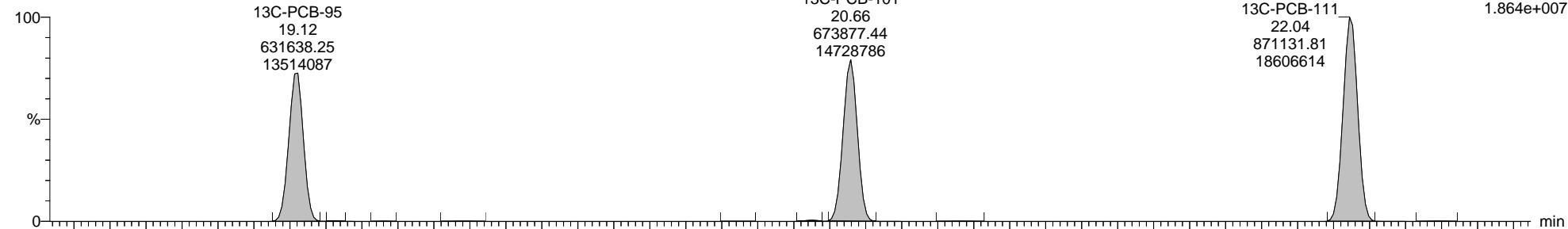
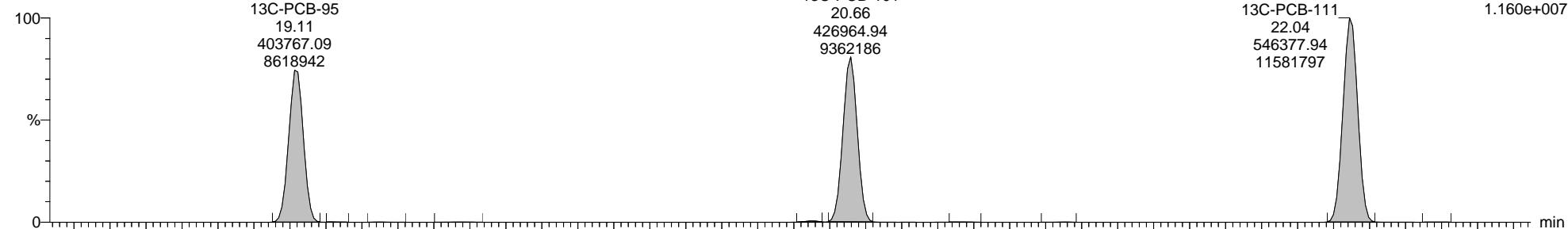
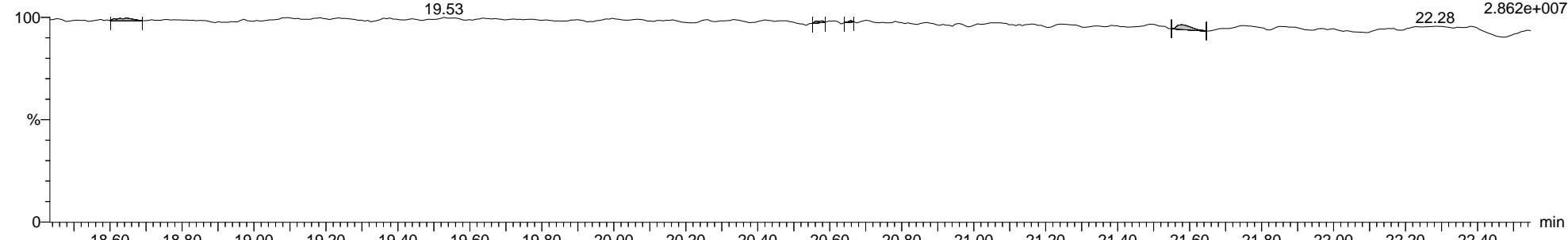
**Name: 5-150917B01, Date: 17-Sep-2015, Time: 15:09:57, ID: H5-15-CS1-011, Description: 1668A-CS#1-015, Vial: Tray1:5****13C-PCB-104**5-150917B01 Smooth(Mn,1x1)  
1668A-CS#1-015 H5-15-CS1-0115-150917B01 Smooth(Mn,1x1)  
1668A-CS#1-015 H5-15-CS1-0115-150917B01 Smooth(Mn,1x1)  
1668A-CS#1-015 H5-15-CS1-011  
15.30;58186228.00;23812212

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Name: 5-150917B01, Date: 17-Sep-2015, Time: 15:09:57, ID: H5-15-CS1-011, Description: 1668A-CS#1-015, Vial: Tray1:5

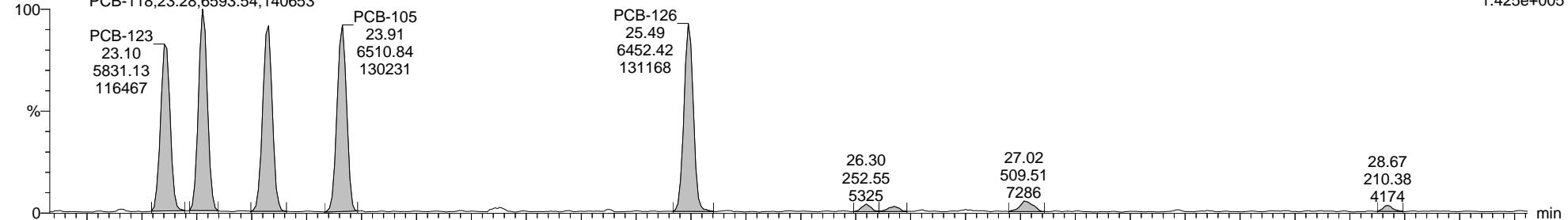
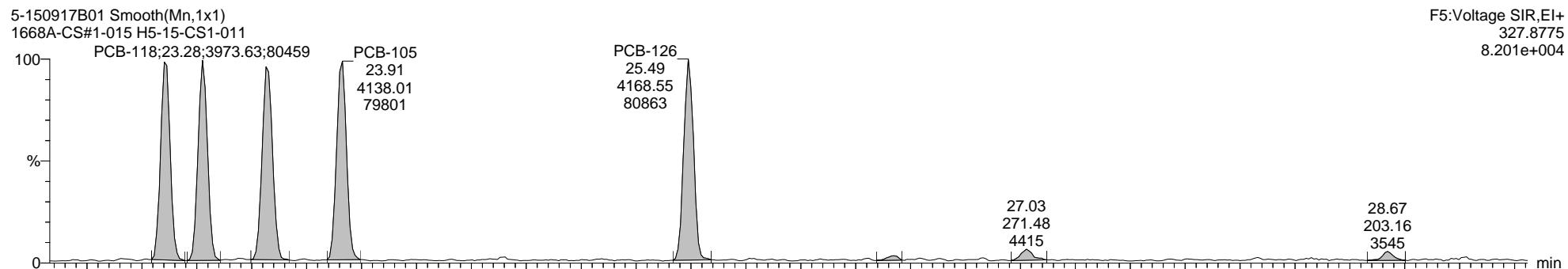
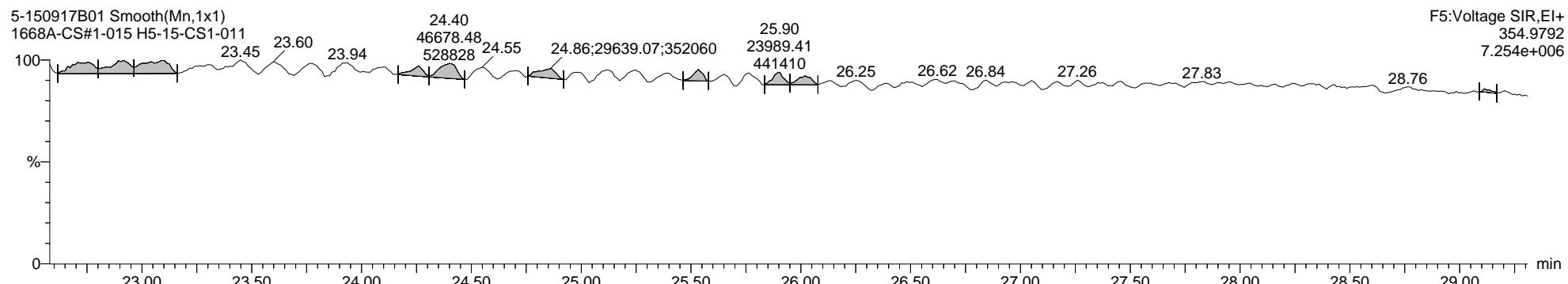
**13C-PCB-111**5-150917B01 Smooth(Mn,1x1)  
1668A-CS#1-015 H5-15-CS1-0115-150917B01 Smooth(Mn,1x1)  
1668A-CS#1-015 H5-15-CS1-0115-150917B01 Smooth(Mn,1x1)  
1668A-CS#1-015 H5-15-CS1-011

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Name: 5-150917B01, Date: 17-Sep-2015, Time: 15:09:57, ID: H5-15-CS1-011, Description: 1668A-CS#1-015, Vial: Tray1:5

**PCB-123**5-150917B01 Smooth(Mn,1x1)  
1668A-CS#1-015 H5-15-CS1-011  
PCB-118;23.28;6593.54;1406535-150917B01 Smooth(Mn,1x1)  
1668A-CS#1-015 H5-15-CS1-011  
PCB-118;23.28;3973.63;804595-150917B01 Smooth(Mn,1x1)  
1668A-CS#1-015 H5-15-CS1-011  
23.45, 23.60, 23.94, 24.40, 46678.48, 528828, 24.55, 24.86, 29639.07, 352060

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Name: 5-150917B01, Date: 17-Sep-2015, Time: 15:09:57, ID: H5-15-CS1-011, Description: 1668A-CS#1-015, Vial: Tray1:5

**13C-PCB-123**

5-150917B01 Smooth(Mn,1x1)  
1668A-CS#1-015 H5-15-CS1-011  
13C-PCB-118;23.26;937874.56;18763520

F5:Voltage SIR,EI+  
337.9207  
1.879e+007

13C-PCB-105  
23.90  
888562.06  
17360098

13C-PCB-126  
25.48  
883463.44  
17340244

27.02  
40979.04  
635505

5-150917B01 Smooth(Mn,1x1)  
1668A-CS#1-015 H5-15-CS1-011  
13C-PCB-118;23.26;584687.94;11856020

F5:Voltage SIR,EI+  
339.918  
1.195e+007

13C-PCB-105  
23.90  
560842.19  
10935809

13C-PCB-126  
25.48  
546010.44  
10739783

27.02  
25446.42  
390171

5-150917B01 Smooth(Mn,1x1)  
1668A-CS#1-015 H5-15-CS1-011  
23.45 23.60 23.94 24.40 46678.48 528828 24.55 24.86;29639.07;352060 25.90 23989.41 441410

F5:Voltage SIR,EI+  
354.9792  
7.254e+006

26.25 26.62 26.84 27.26 27.83 28.76

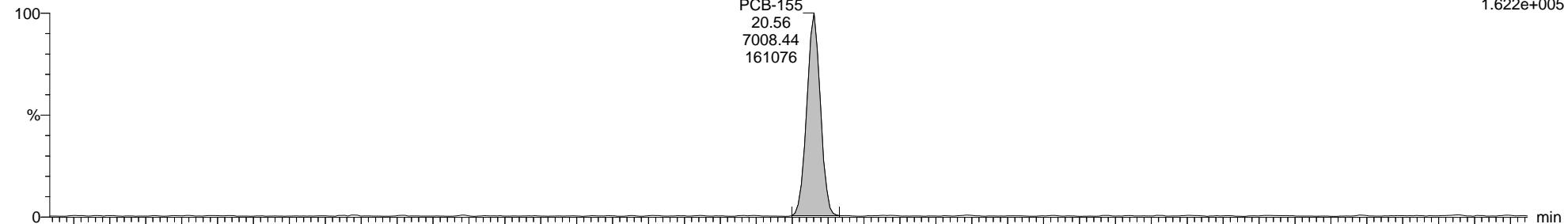
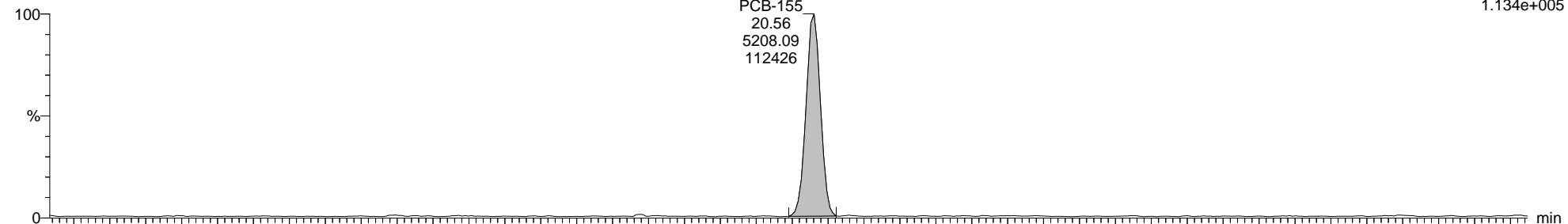
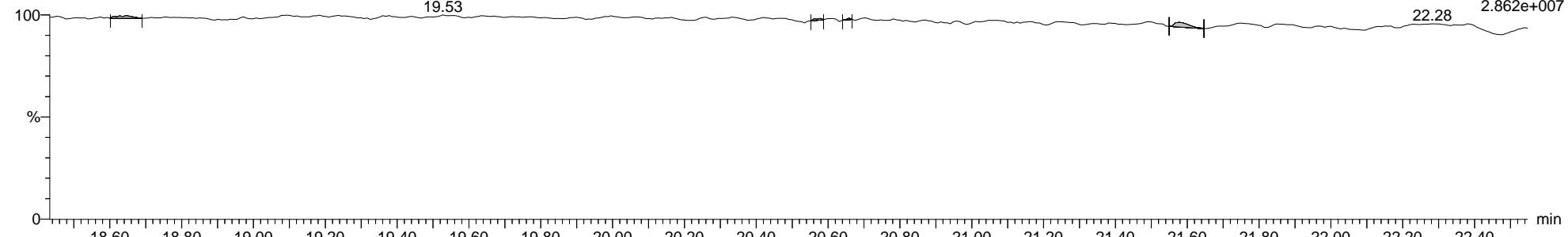
26.00

23.00 23.50 24.00 24.50 25.00 25.50 26.00 26.50 27.00 27.50 28.00 28.50 29.00 min

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

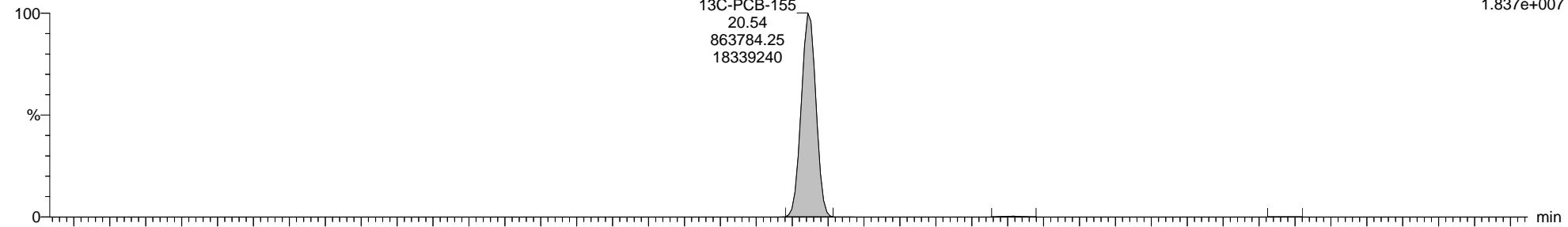
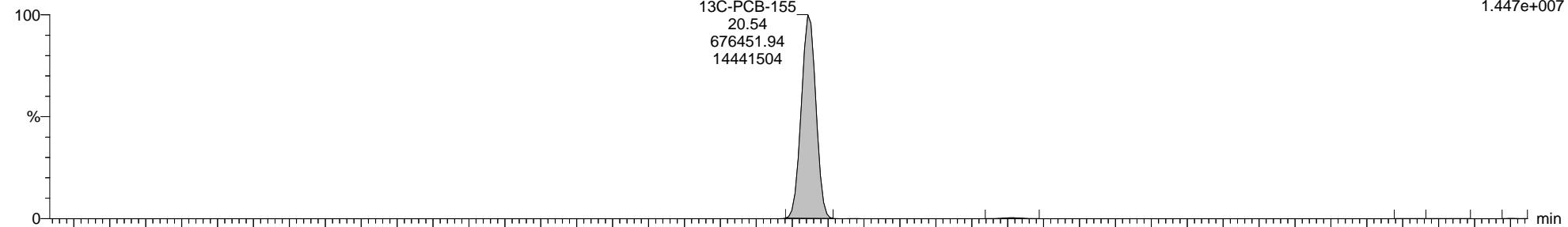
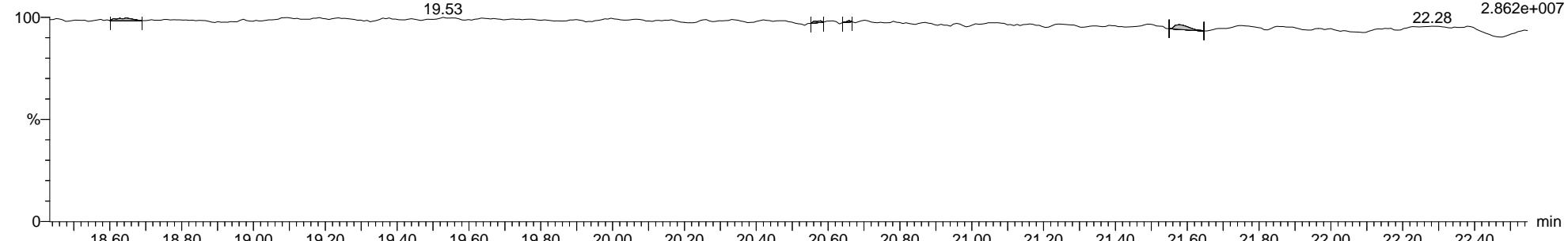
**Name: 5-150917B01, Date: 17-Sep-2015, Time: 15:09:57, ID: H5-15-CS1-011, Description: 1668A-CS#1-015, Vial: Tray1:5****PCB-155**5-150917B01 Smooth(Mn,1x1)  
1668A-CS#1-015 H5-15-CS1-0115-150917B01 Smooth(Mn,1x1)  
1668A-CS#1-015 H5-15-CS1-0115-150917B01 Smooth(Mn,1x1)  
1668A-CS#1-015 H5-15-CS1-011

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Name: 5-150917B01, Date: 17-Sep-2015, Time: 15:09:57, ID: H5-15-CS1-011, Description: 1668A-CS#1-015, Vial: Tray1:5

**13C-PCB-155**5-150917B01 Smooth(Mn,1x1)  
1668A-CS#1-015 H5-15-CS1-0115-150917B01 Smooth(Mn,1x1)  
1668A-CS#1-015 H5-15-CS1-0115-150917B01 Smooth(Mn,1x1)  
1668A-CS#1-015 H5-15-CS1-011

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

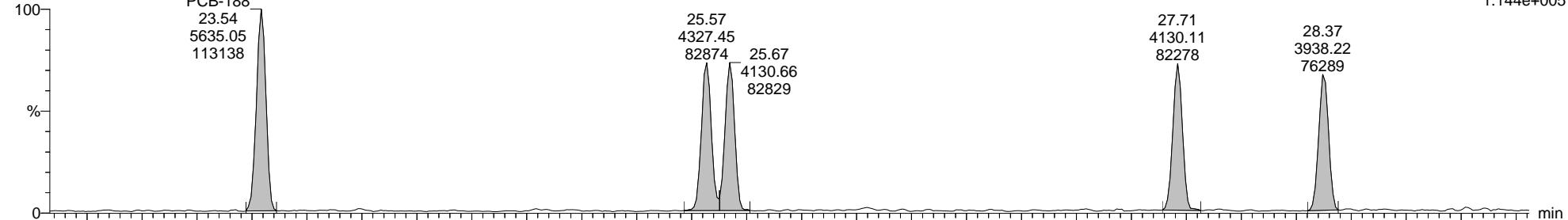
Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Name: 5-150917B01, Date: 17-Sep-2015, Time: 15:09:57, ID: H5-15-CS1-011, Description: 1668A-CS#1-015, Vial: Tray1:5

**PCB-188**

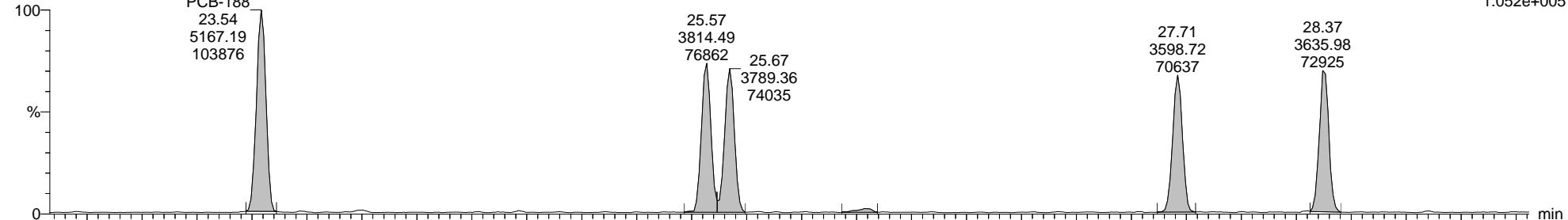
5-150917B01 Smooth(Mn,1x1)  
1668A-CS#1-015 H5-15-CS1-011  
PCB-188

F5:Voltage SIR,EI+  
393.8025  
1.144e+005



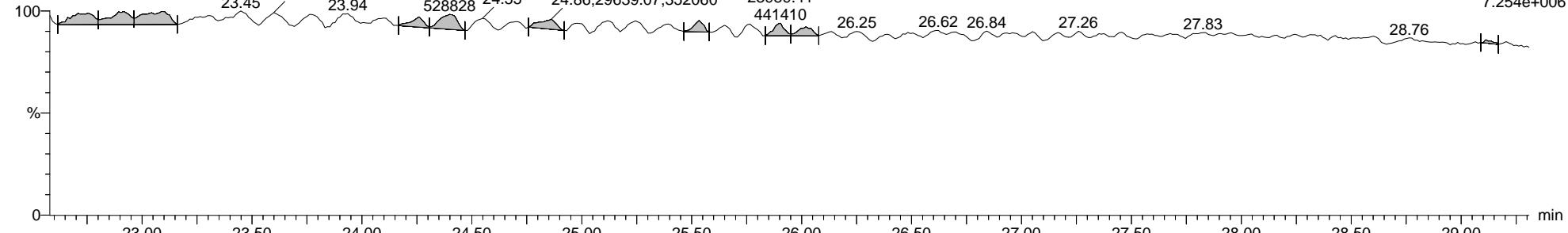
5-150917B01 Smooth(Mn,1x1)  
1668A-CS#1-015 H5-15-CS1-011  
PCB-188

F5:Voltage SIR,EI+  
395.7995  
1.052e+005



5-150917B01 Smooth(Mn,1x1)  
1668A-CS#1-015 H5-15-CS1-011  
PCB-188

F5:Voltage SIR,EI+  
354.9792  
7.254e+006



Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

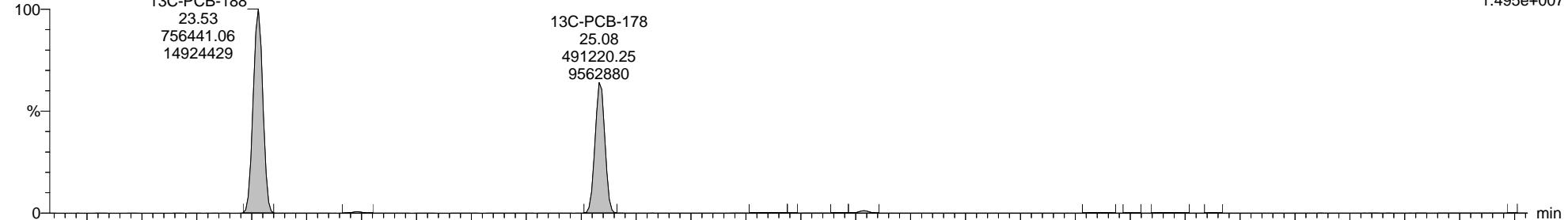
Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Name: 5-150917B01, Date: 17-Sep-2015, Time: 15:09:57, ID: H5-15-CS1-011, Description: 1668A-CS#1-015, Vial: Tray1:5

**13C-PCB-188**

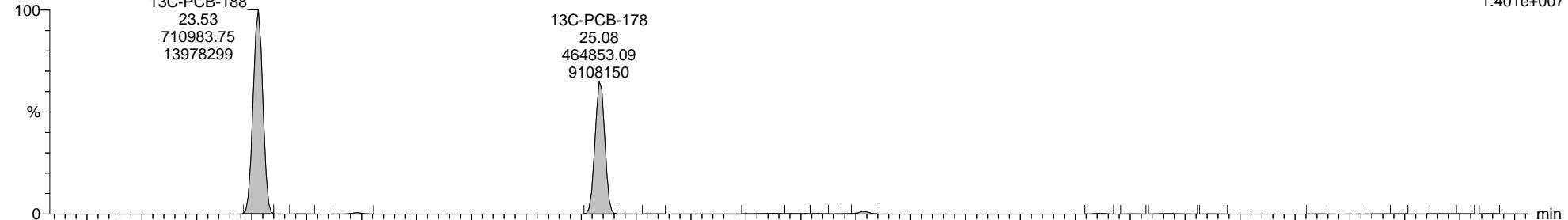
5-150917B01 Smooth(Mn,1x1)  
1668A-CS#1-015 H5-15-CS1-011  
13C-PCB-188

F5:Voltage SIR,EI+  
405.8428  
1.495e+007



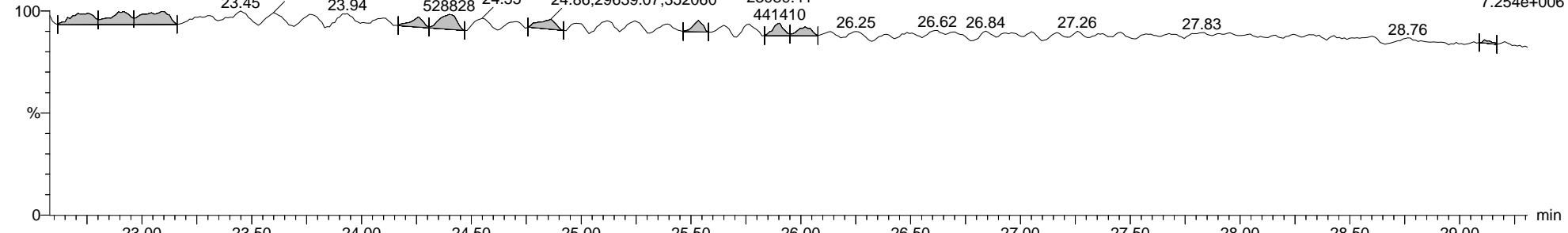
5-150917B01 Smooth(Mn,1x1)  
1668A-CS#1-015 H5-15-CS1-011  
13C-PCB-188

F5:Voltage SIR,EI+  
407.8399  
1.401e+007



5-150917B01 Smooth(Mn,1x1)  
1668A-CS#1-015 H5-15-CS1-011

F5:Voltage SIR,EI+  
354.9792  
7.254e+006

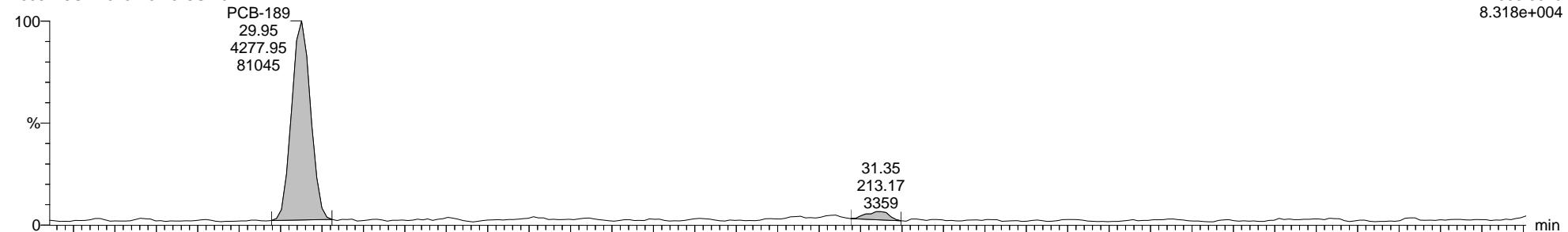
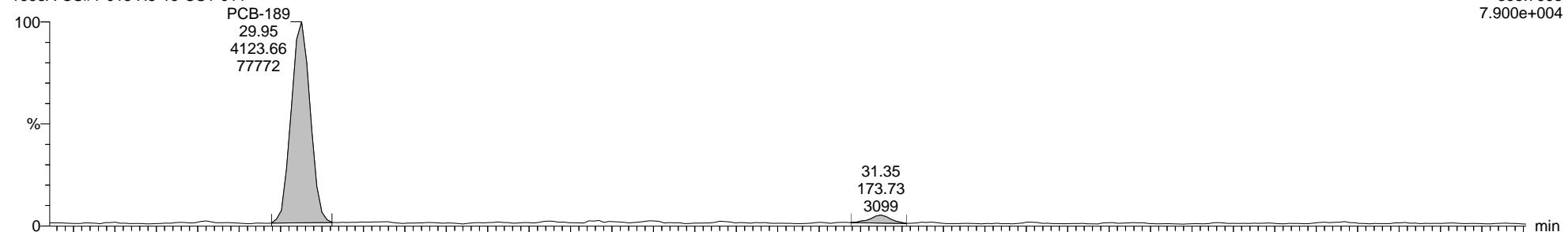
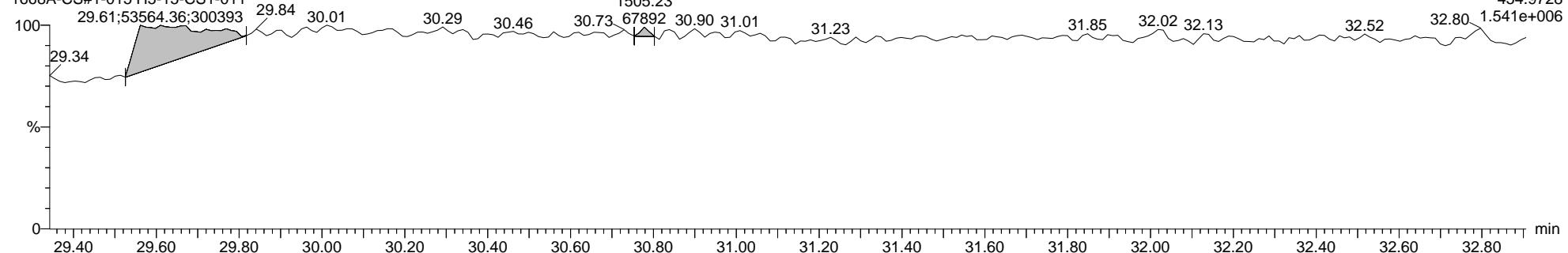


Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Name: 5-150917B01, Date: 17-Sep-2015, Time: 15:09:57, ID: H5-15-CS1-011, Description: 1668A-CS#1-015, Vial: Tray1:5

**PCB-189**5-150917B01 Smooth(Mn,1x1)  
1668A-CS#1-015 H5-15-CS1-0115-150917B01 Smooth(Mn,1x1)  
1668A-CS#1-015 H5-15-CS1-0115-150917B01 Smooth(Mn,1x1)  
1668A-CS#1-015 H5-15-CS1-011

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

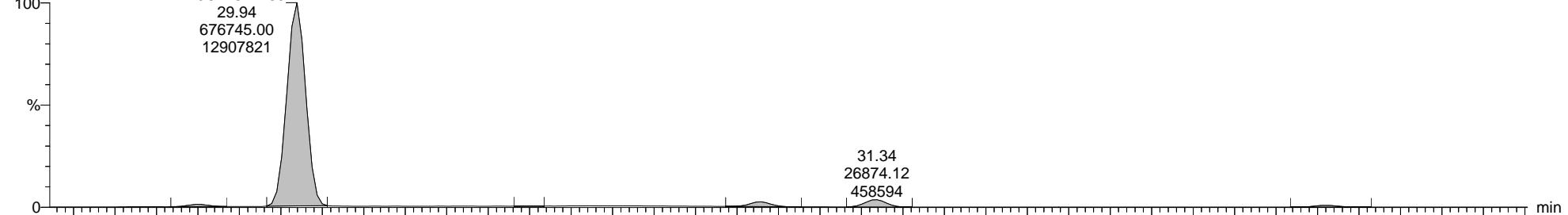
Name: 5-150917B01, Date: 17-Sep-2015, Time: 15:09:57, ID: H5-15-CS1-011, Description: 1668A-CS#1-015, Vial: Tray1:5

**13C-PCB-189**

5-150917B01 Smooth(Mn,1x1)

1668A-CS#1-015 H5-15-CS1-011

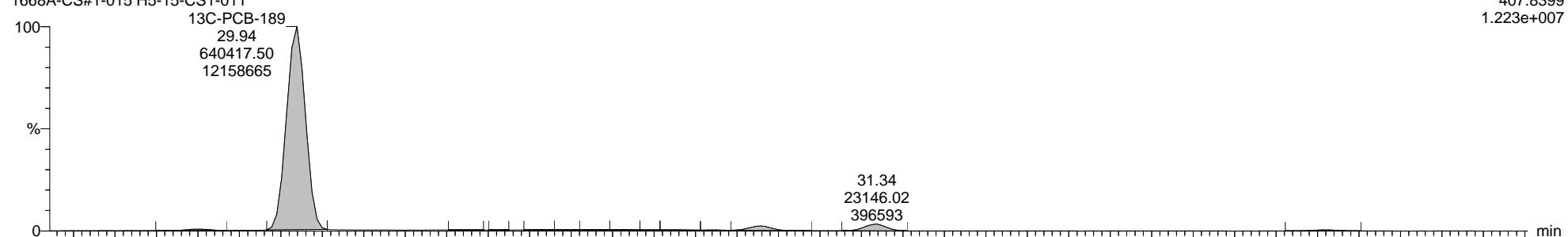
13C-PCB-189



5-150917B01 Smooth(Mn,1x1)

1668A-CS#1-015 H5-15-CS1-011

13C-PCB-189



5-150917B01 Smooth(Mn,1x1)

1668A-CS#1-015 H5-15-CS1-011

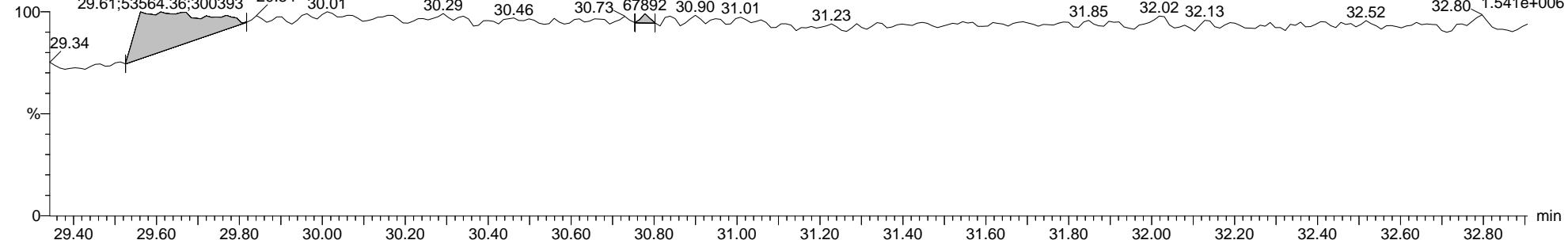
29.61;53564.36;300393 29.84 30.01

30.78

1505.23

F6:Voltage SIR,EI+

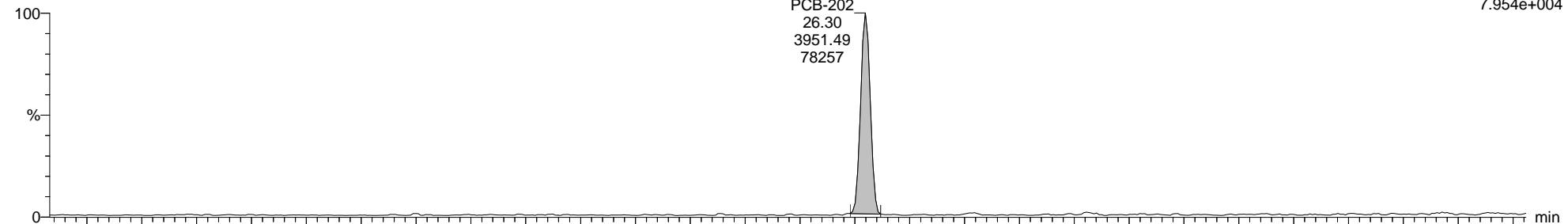
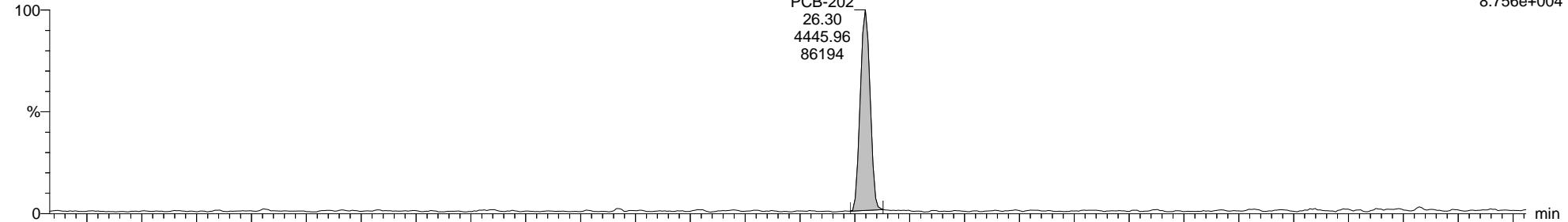
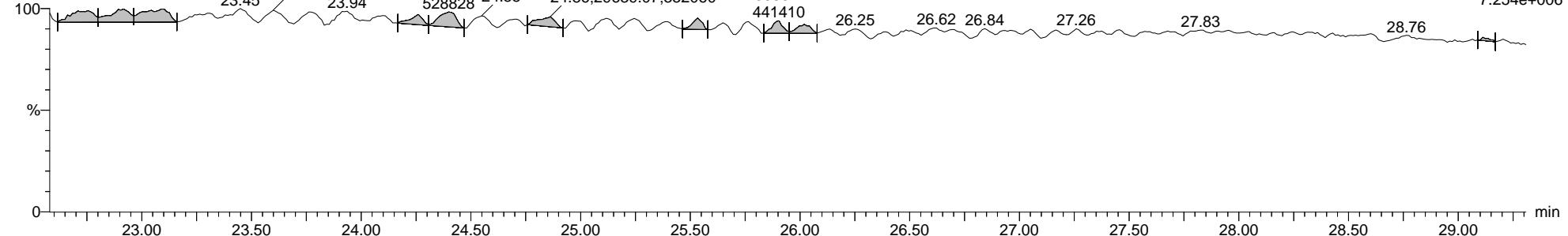
454.9728



Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

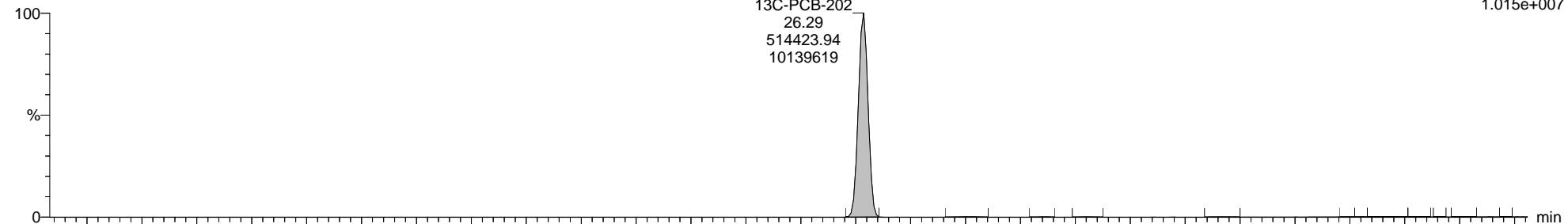
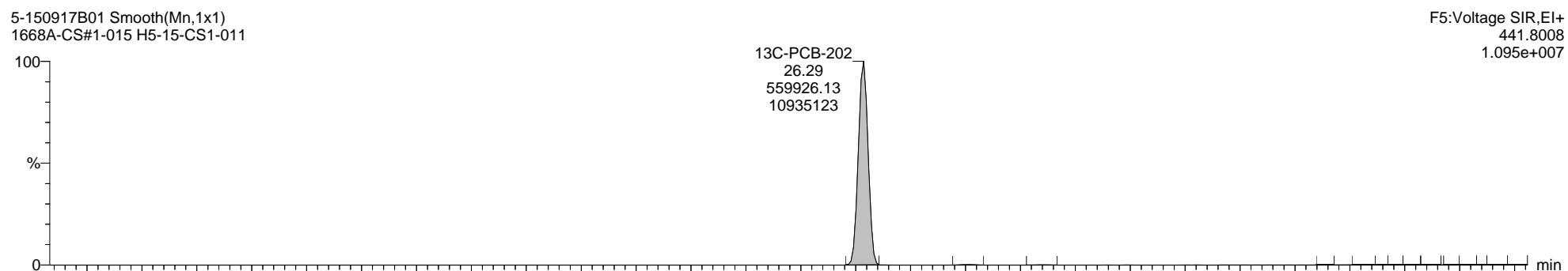
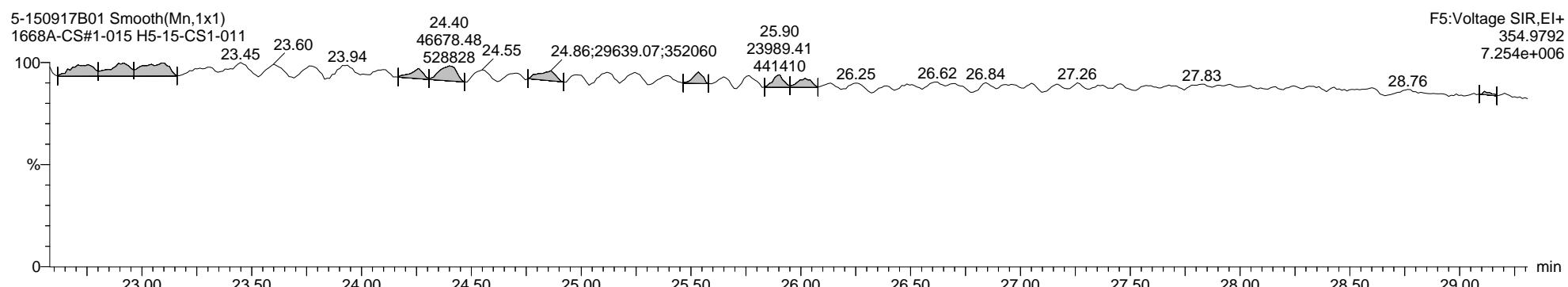
Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

**Name: 5-150917B01, Date: 17-Sep-2015, Time: 15:09:57, ID: H5-15-CS1-011, Description: 1668A-CS#1-015, Vial: Tray1:5****PCB-202**5-150917B01 Smooth(Mn,1x1)  
1668A-CS#1-015 H5-15-CS1-011F5:Voltage SIR,EI+  
427.7635  
7.954e+0045-150917B01 Smooth(Mn,1x1)  
1668A-CS#1-015 H5-15-CS1-011F5:Voltage SIR,EI+  
429.7606  
8.756e+0045-150917B01 Smooth(Mn,1x1)  
1668A-CS#1-015 H5-15-CS1-011F5:Voltage SIR,EI+  
354.9792  
7.254e+006

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

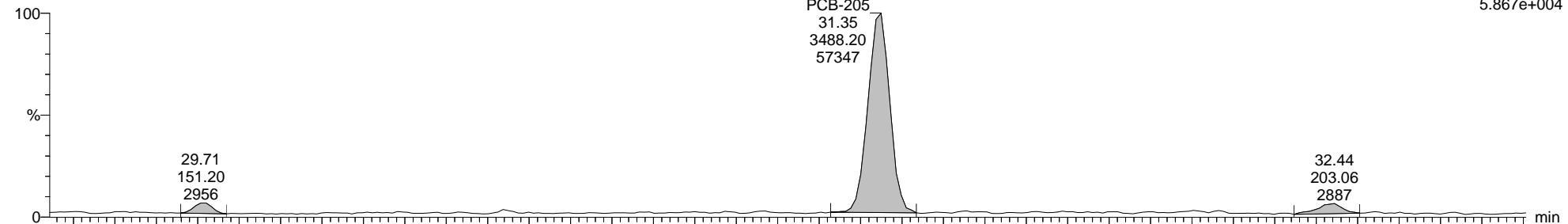
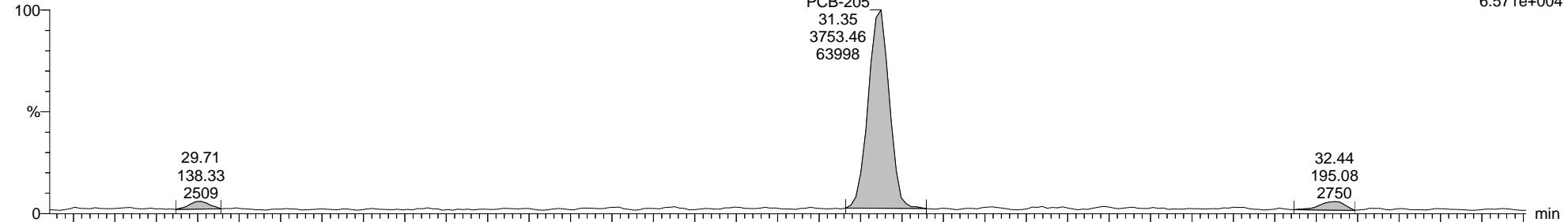
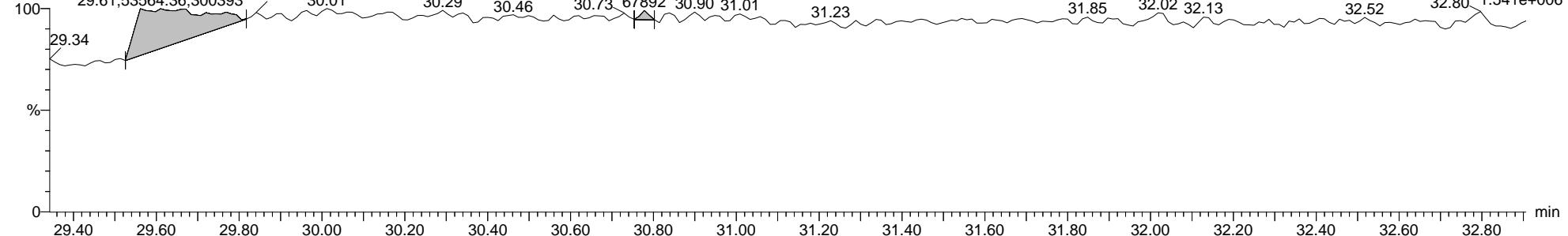
**Name: 5-150917B01, Date: 17-Sep-2015, Time: 15:09:57, ID: H5-15-CS1-011, Description: 1668A-CS#1-015, Vial: Tray1:5****13C-PCB-202**5-150917B01 Smooth(Mn,1x1)  
1668A-CS#1-015 H5-15-CS1-0115-150917B01 Smooth(Mn,1x1)  
1668A-CS#1-015 H5-15-CS1-0115-150917B01 Smooth(Mn,1x1)  
1668A-CS#1-015 H5-15-CS1-011

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Name: 5-150917B01, Date: 17-Sep-2015, Time: 15:09:57, ID: H5-15-CS1-011, Description: 1668A-CS#1-015, Vial: Tray1:5

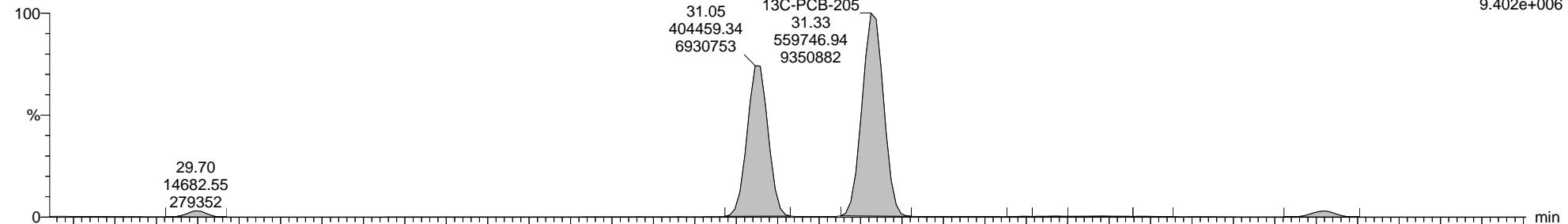
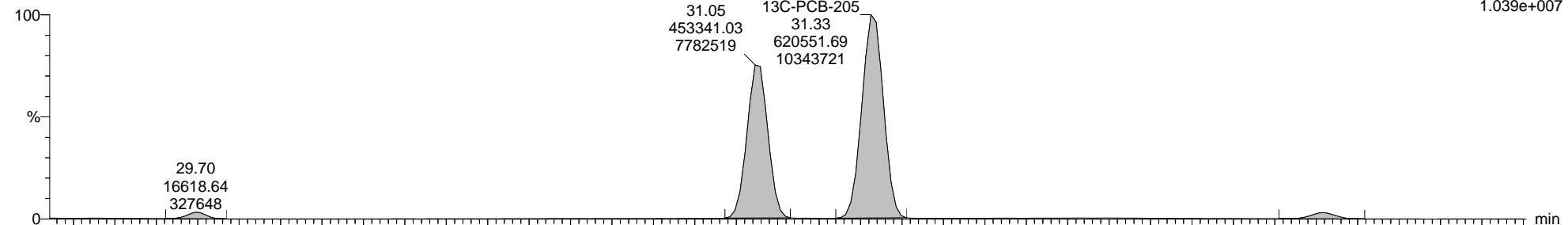
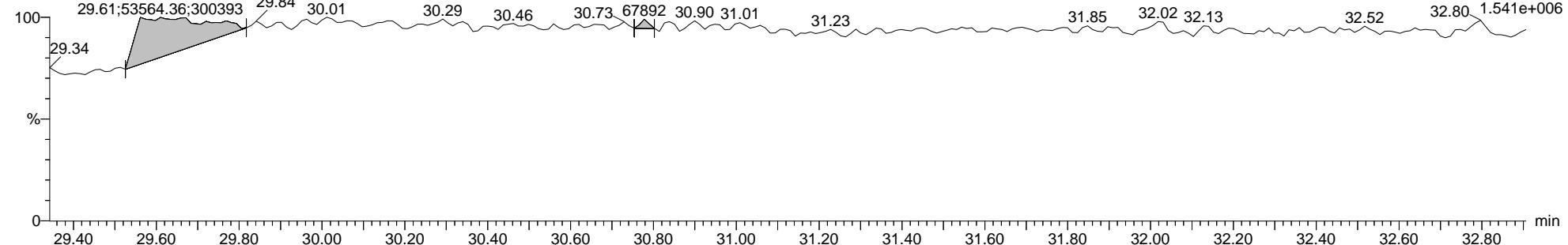
**PCB-205**5-150917B01 Smooth(Mn,1x1)  
1668A-CS#1-015 H5-15-CS1-011F6:Voltage SIR,EI+  
427.7635  
5.867e+0045-150917B01 Smooth(Mn,1x1)  
1668A-CS#1-015 H5-15-CS1-011F6:Voltage SIR,EI+  
429.7606  
6.571e+0045-150917B01 Smooth(Mn,1x1)  
1668A-CS#1-015 H5-15-CS1-011F6:Voltage SIR,EI+  
454.9728  
1.541e+006

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Name: 5-150917B01, Date: 17-Sep-2015, Time: 15:09:57, ID: H5-15-CS1-011, Description: 1668A-CS#1-015, Vial: Tray1:5

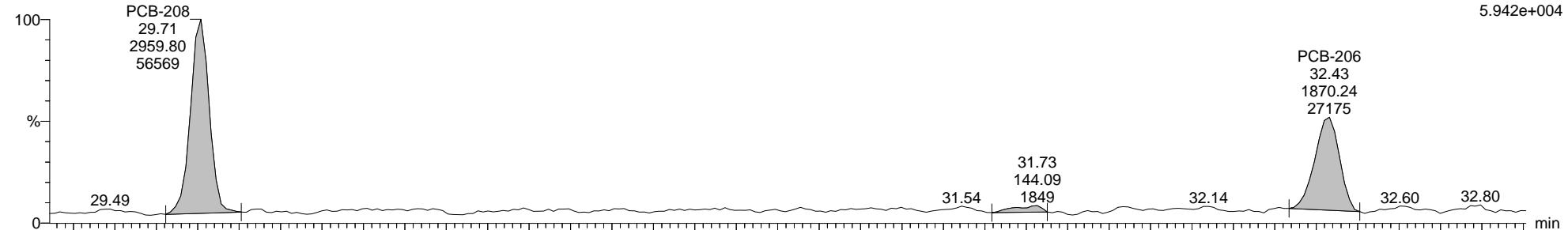
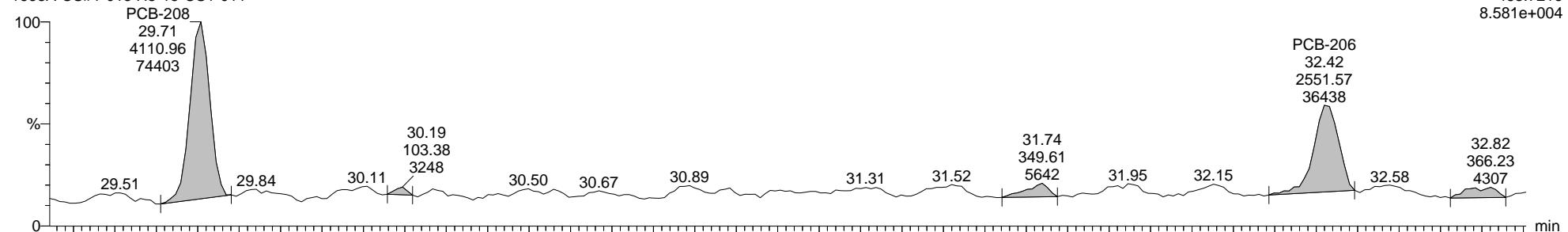
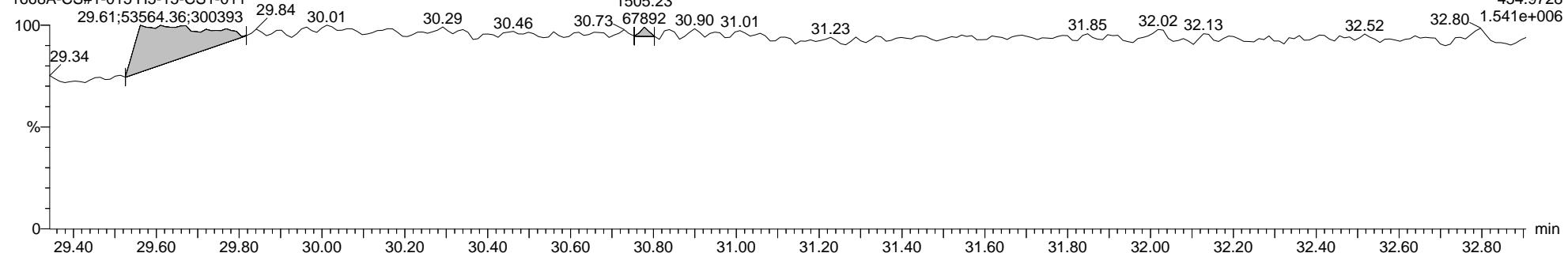
**13C-PCB-205**5-150917B01 Smooth(Mn,1x1)  
1668A-CS#1-015 H5-15-CS1-011F6:Voltage SIR,EI+  
439.8038  
9.402e+0065-150917B01 Smooth(Mn,1x1)  
1668A-CS#1-015 H5-15-CS1-011F6:Voltage SIR,EI+  
441.8008  
1.039e+0075-150917B01 Smooth(Mn,1x1)  
1668A-CS#1-015 H5-15-CS1-011F6:Voltage SIR,EI+  
454.9728  
1.541e+006

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Name: 5-150917B01, Date: 17-Sep-2015, Time: 15:09:57, ID: H5-15-CS1-011, Description: 1668A-CS#1-015, Vial: Tray1:5

**PCB-208**5-150917B01 Smooth(Mn,1x1)  
1668A-CS#1-015 H5-15-CS1-0115-150917B01 Smooth(Mn,1x1)  
1668A-CS#1-015 H5-15-CS1-0115-150917B01 Smooth(Mn,1x1)  
1668A-CS#1-015 H5-15-CS1-011

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

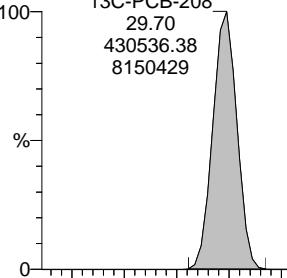
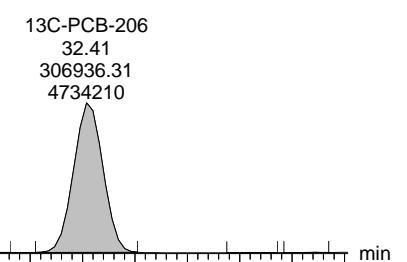
Name: 5-150917B01, Date: 17-Sep-2015, Time: 15:09:57, ID: H5-15-CS1-011, Description: 1668A-CS#1-015, Vial: Tray1:5

**13C-PCB-208**

5-150917B01 Smooth(Mn,1x1)

1668A-CS#1-015 H5-15-CS1-011

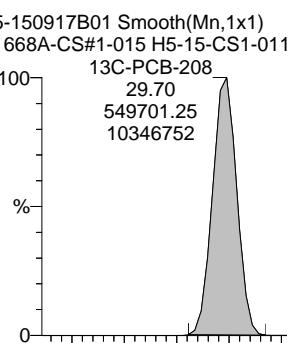
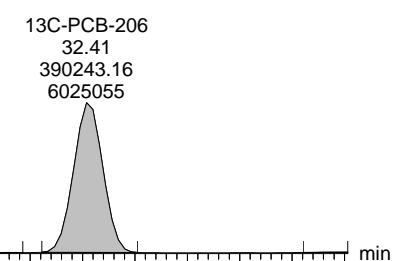
13C-PCB-208

29.70  
430536.38  
8150429F6:Voltage SIR,EI+  
473.7648  
8.164e+00613C-PCB-206  
32.41  
306936.31  
4734210

5-150917B01 Smooth(Mn,1x1)

1668A-CS#1-015 H5-15-CS1-011

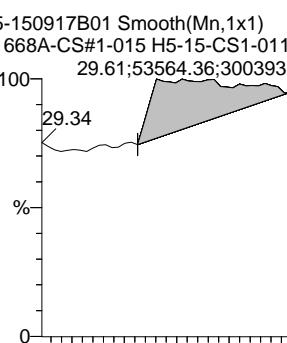
13C-PCB-208

29.70  
549701.25  
10346752F6:Voltage SIR,EI+  
475.7619  
1.037e+00713C-PCB-206  
32.41  
390243.16  
6025055

5-150917B01 Smooth(Mn,1x1)

1668A-CS#1-015 H5-15-CS1-011

29.61;53564.36;300393

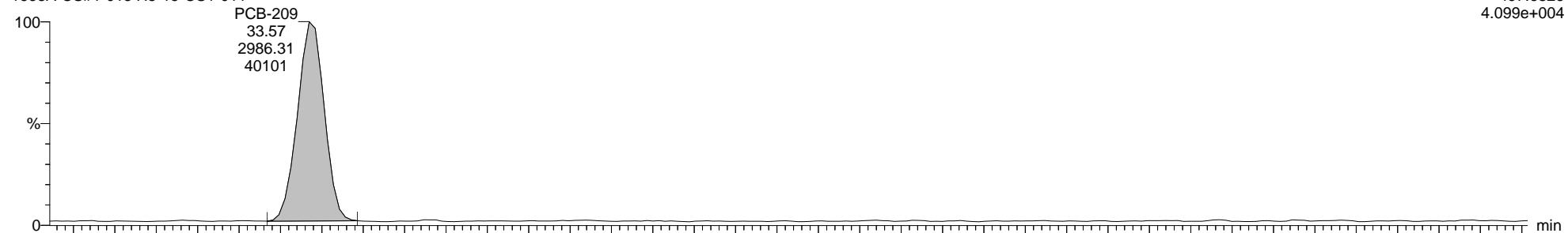
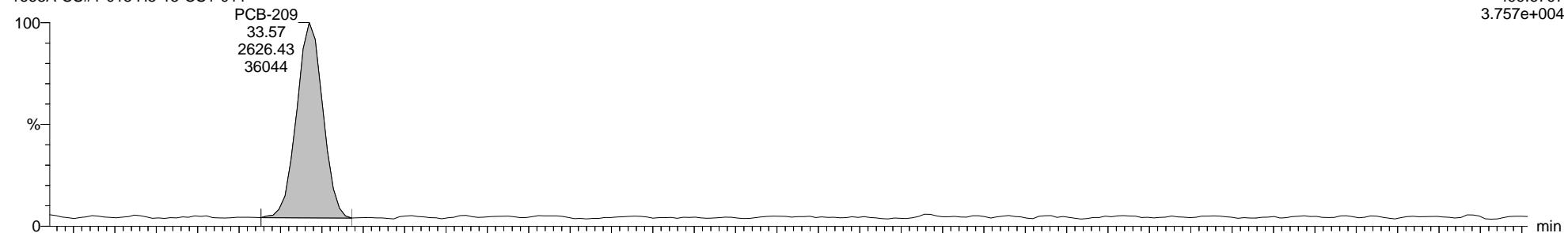
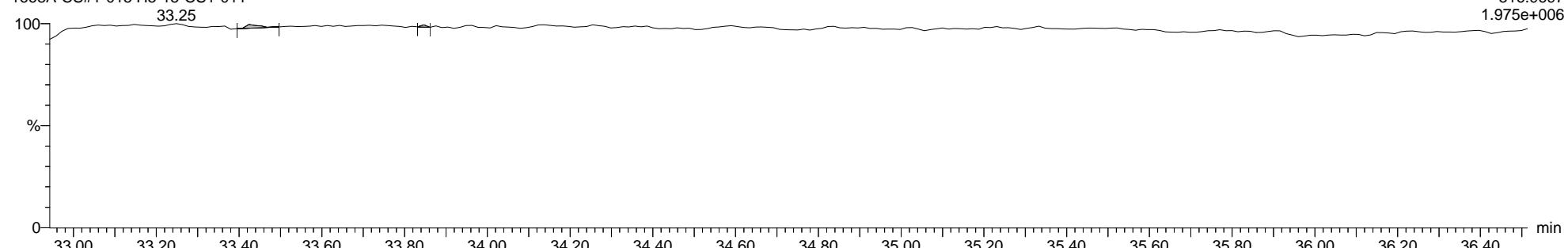
29.84  
30.01  
30.29  
30.46  
30.73  
30.78  
1505.23  
31.01  
31.23  
31.85  
32.02  
32.13  
32.52  
32.80  
1.541e+006F6:Voltage SIR,EI+  
454.9728  
1.541e+006

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Name: 5-150917B01, Date: 17-Sep-2015, Time: 15:09:57, ID: H5-15-CS1-011, Description: 1668A-CS#1-015, Vial: Tray1:5

**PCB-209**5-150917B01 Smooth(Mn,1x1)  
1668A-CS#1-015 H5-15-CS1-0115-150917B01 Smooth(Mn,1x1)  
1668A-CS#1-015 H5-15-CS1-0115-150917B01 Smooth(Mn,1x1)  
1668A-CS#1-015 H5-15-CS1-011

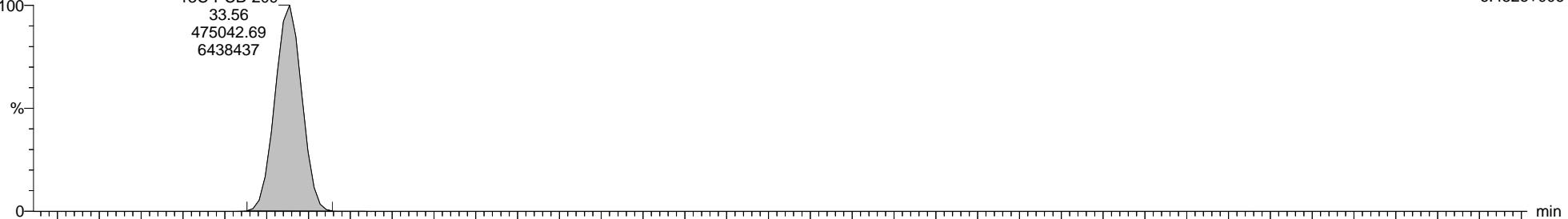
Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

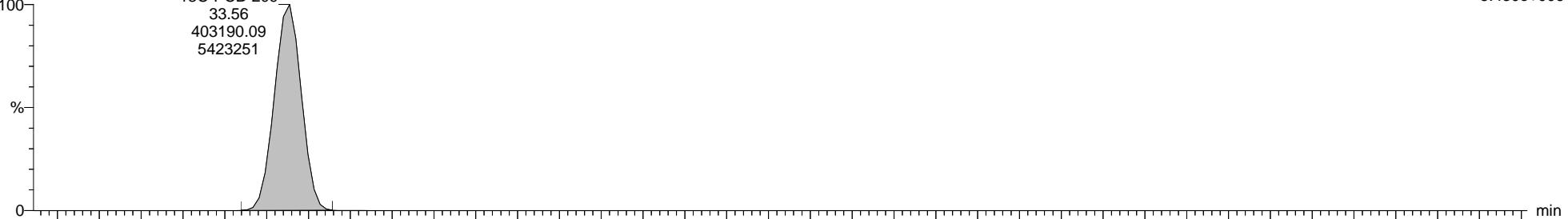
Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

**Name: 5-150917B01, Date: 17-Sep-2015, Time: 15:09:57, ID: H5-15-CS1-011, Description: 1668A-CS#1-015, Vial: Tray1:5****13C-PCB-209**5-150917B01 Smooth(Mn,1x1)  
1668A-CS#1-015 H5-15-CS1-011

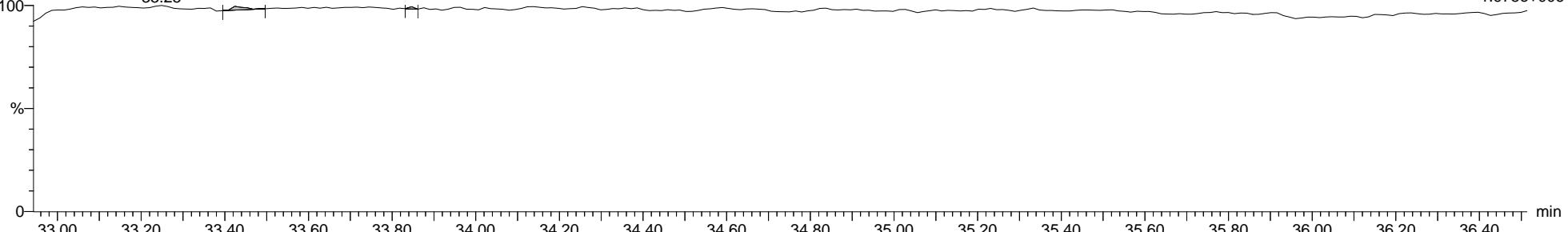
13C-PCB-209

5-150917B01 Smooth(Mn,1x1)  
1668A-CS#1-015 H5-15-CS1-011

13C-PCB-209

5-150917B01 Smooth(Mn,1x1)  
1668A-CS#1-015 H5-15-CS1-011

33.25

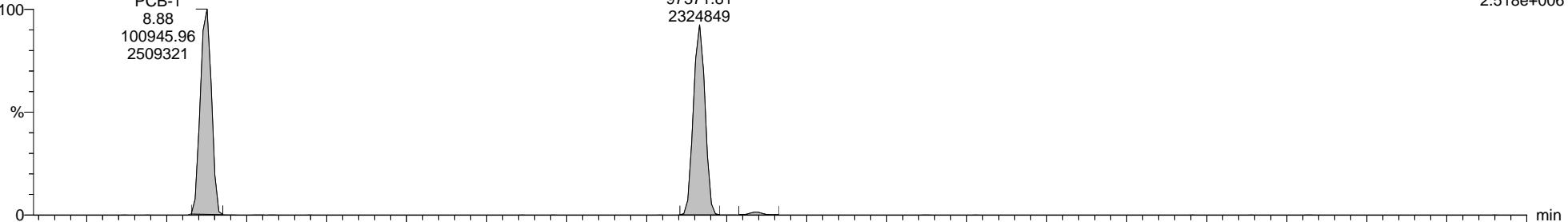
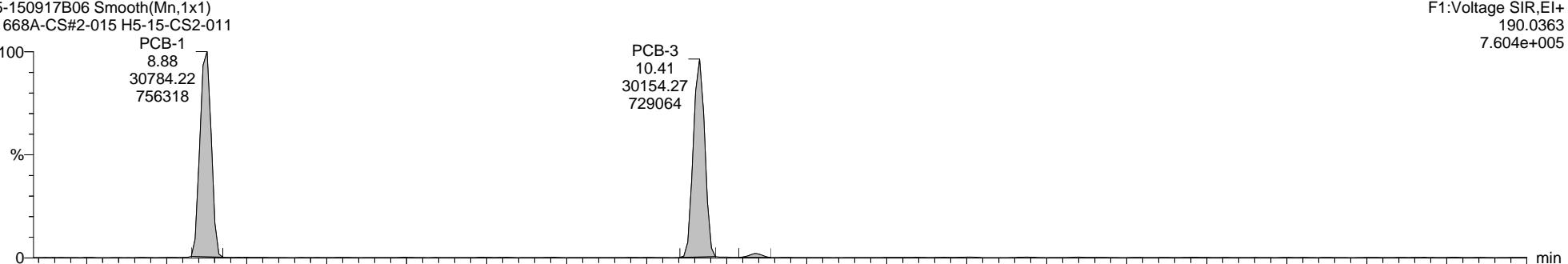
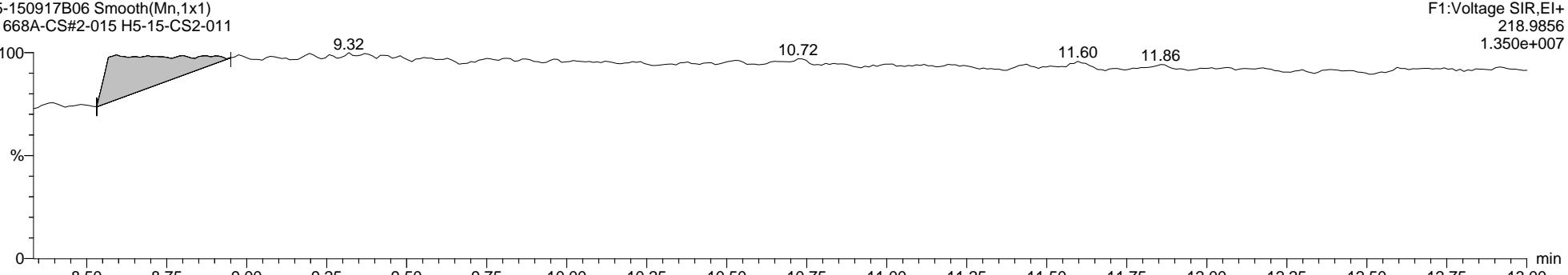


Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Name: 5-150917B06, Date: 17-Sep-2015, Time: 18:44:53, ID: H5-15-CS2-011, Description: 1668A-CS#2-015, Vial: Tray1:4

**PCB-1**5-150917B06 Smooth(Mn,1x1)  
1668A-CS#2-015 H5-15-CS2-011PCB-1  
8.88  
100945.96  
2509321PCB-3  
10.41  
97371.81  
2324849F1:Voltage SIR,EI+  
188.0393  
2.518e+0065-150917B06 Smooth(Mn,1x1)  
1668A-CS#2-015 H5-15-CS2-011PCB-1  
8.88  
30784.22  
756318PCB-3  
10.41  
30154.27  
729064F1:Voltage SIR,EI+  
190.0363  
7.604e+0055-150917B06 Smooth(Mn,1x1)  
1668A-CS#2-015 H5-15-CS2-011F1:Voltage SIR,EI+  
218.9856  
1.350e+007

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Name: 5-150917B06, Date: 17-Sep-2015, Time: 18:44:53, ID: H5-15-CS2-011, Description: 1668A-CS#2-015, Vial: Tray1:4

**13C-PCB-1**

5-150917B06 Smooth(Mn,1x1)

1668A-CS#2-015 H5-15-CS2-011

13C-PCB-1

8.86  
2296633.50  
57374000

13C-PCB-3

10.40

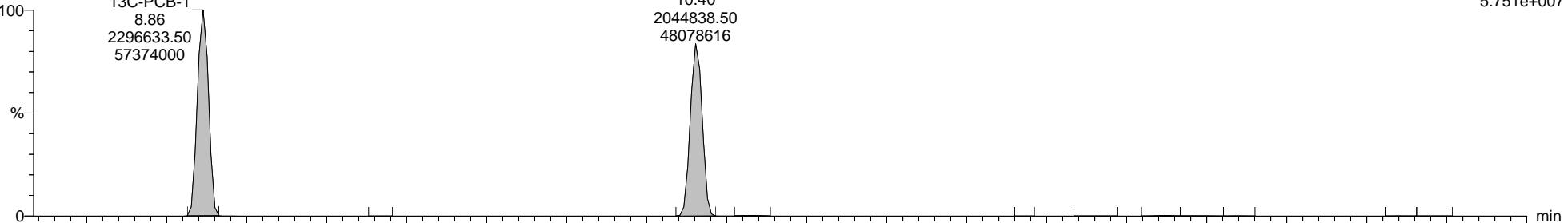
2044838.50

48078616

F1:Voltage SIR,EI+

200.0795

5.751e+007



5-150917B06 Smooth(Mn,1x1)

1668A-CS#2-015 H5-15-CS2-011

13C-PCB-1

8.86  
730897.50  
18240520

13C-PCB-3

10.40

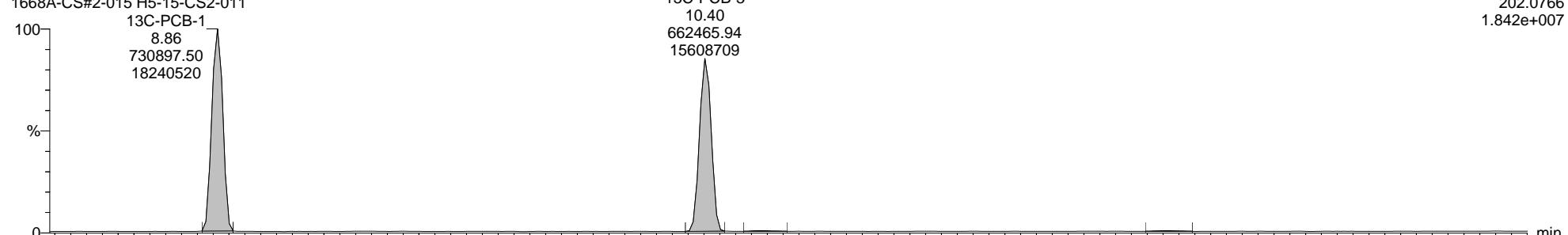
662465.94

15608709

F1:Voltage SIR,EI+

202.0766

1.842e+007



5-150917B06 Smooth(Mn,1x1)

1668A-CS#2-015 H5-15-CS2-011

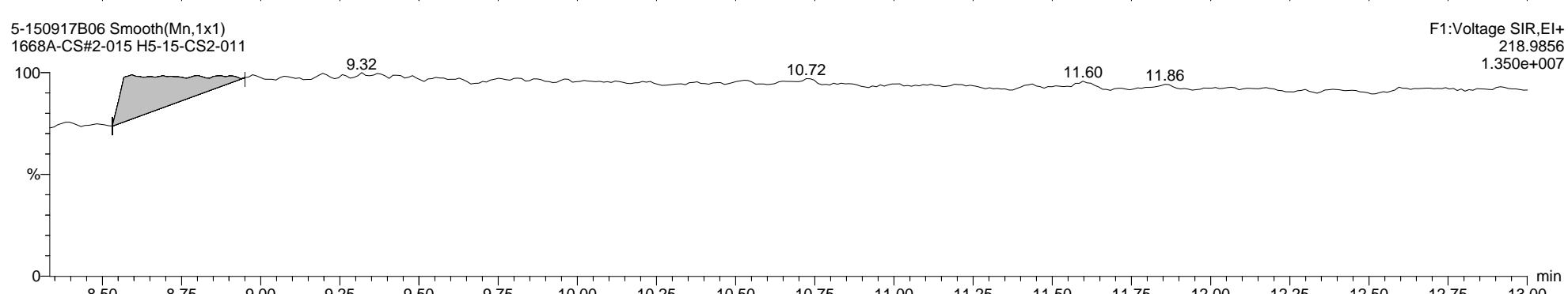
13C-PCB-1

9.32  
10.72  
11.60  
11.86

F1:Voltage SIR,EI+

218.9856

1.350e+007

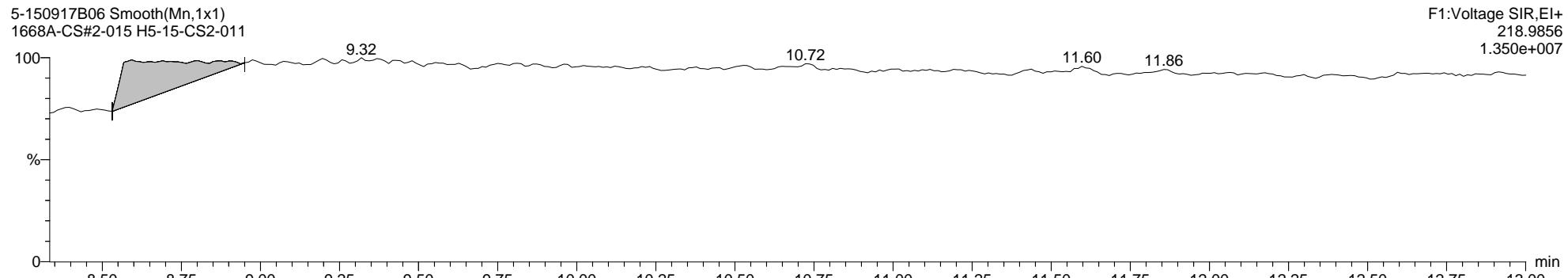
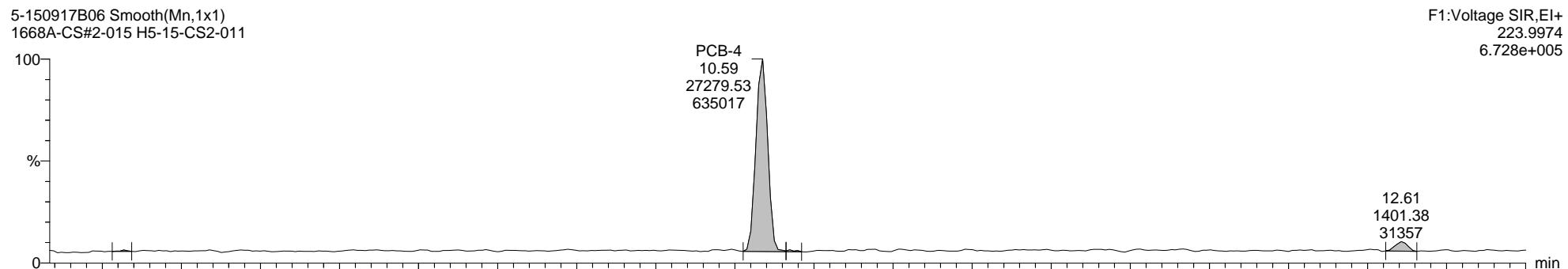
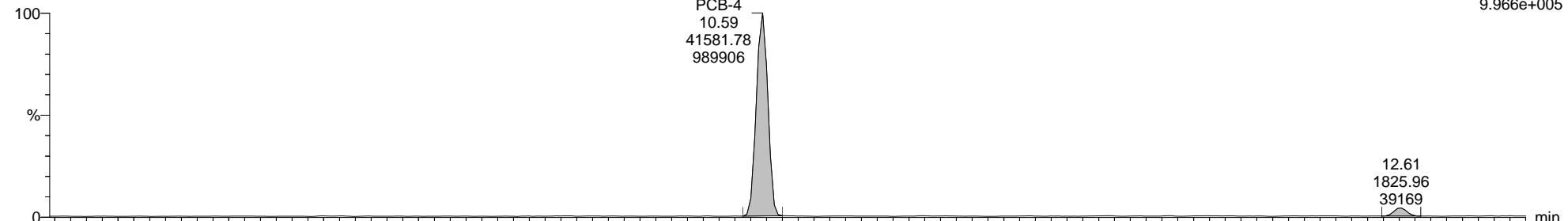


Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

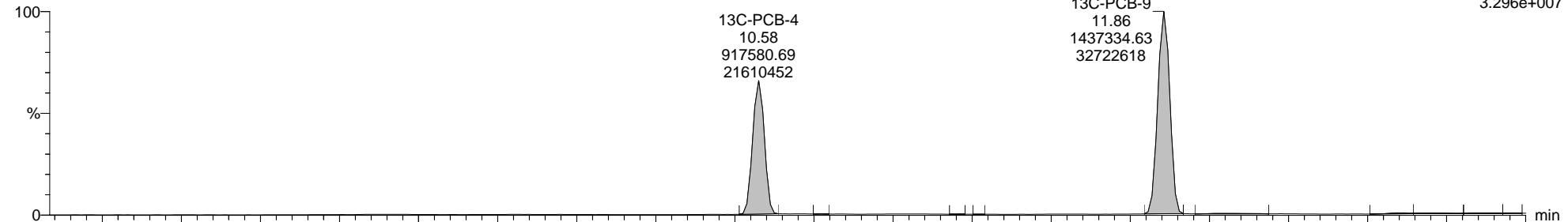
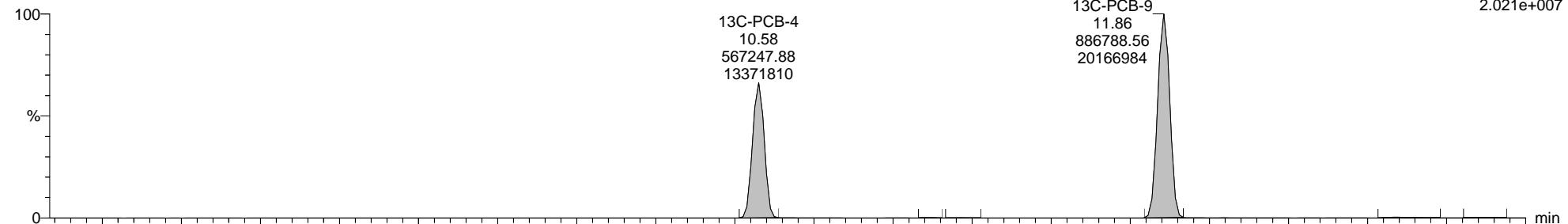
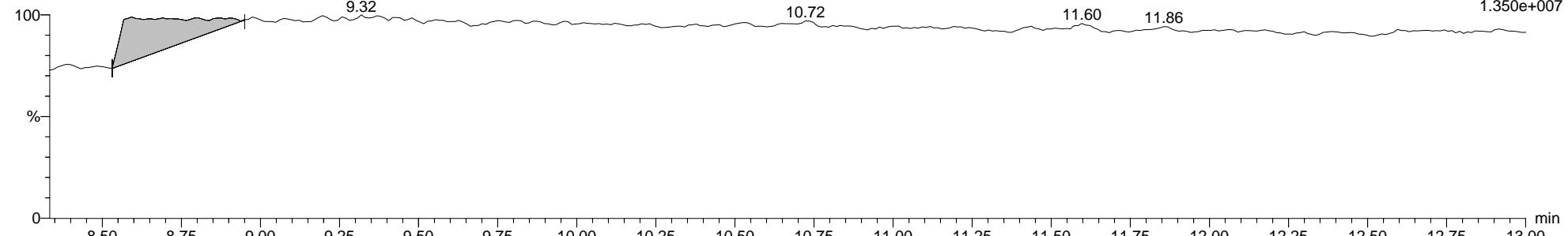
Name: 5-150917B06, Date: 17-Sep-2015, Time: 18:44:53, ID: H5-15-CS2-011, Description: 1668A-CS#2-015, Vial: Tray1:4

**PCB-4**5-150917B06 Smooth(Mn,1x1)  
1668A-CS#2-015 H5-15-CS2-011

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

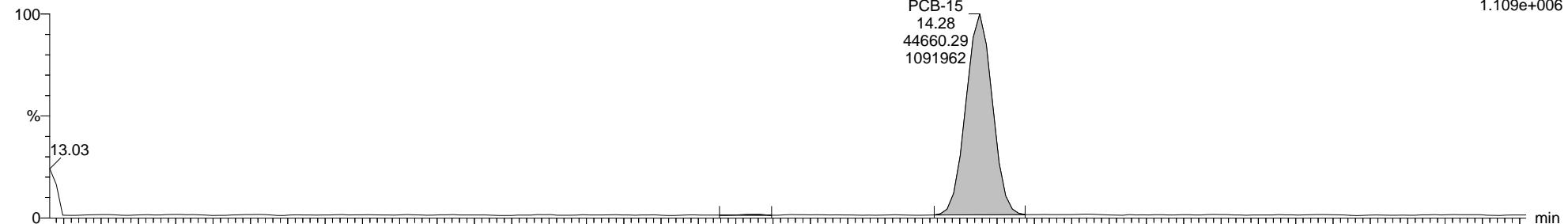
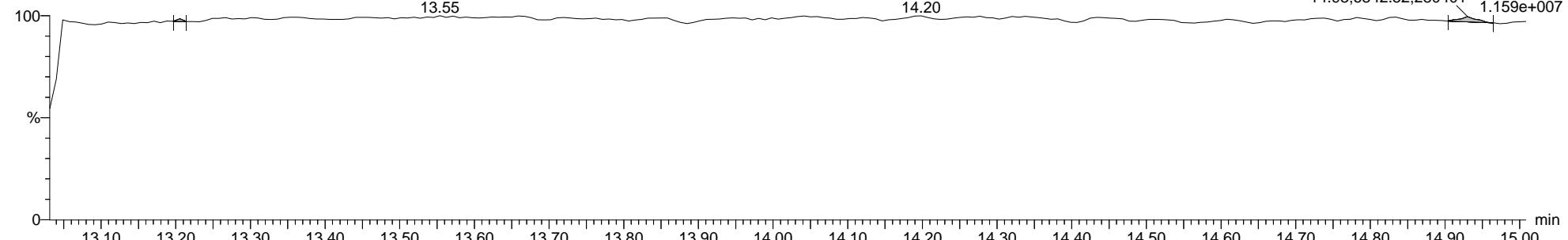
Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

**Name: 5-150917B06, Date: 17-Sep-2015, Time: 18:44:53, ID: H5-15-CS2-011, Description: 1668A-CS#2-015, Vial: Tray1:4****13C-PCB-4**5-150917B06 Smooth(Mn,1x1)  
1668A-CS#2-015 H5-15-CS2-0115-150917B06 Smooth(Mn,1x1)  
1668A-CS#2-015 H5-15-CS2-0115-150917B06 Smooth(Mn,1x1)  
1668A-CS#2-015 H5-15-CS2-011

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

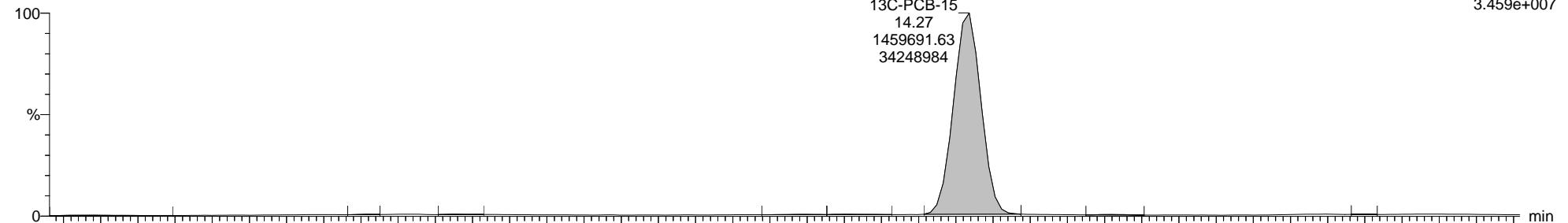
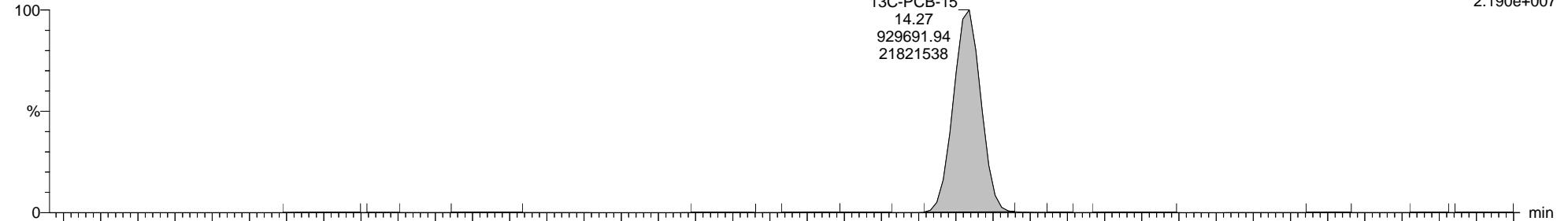
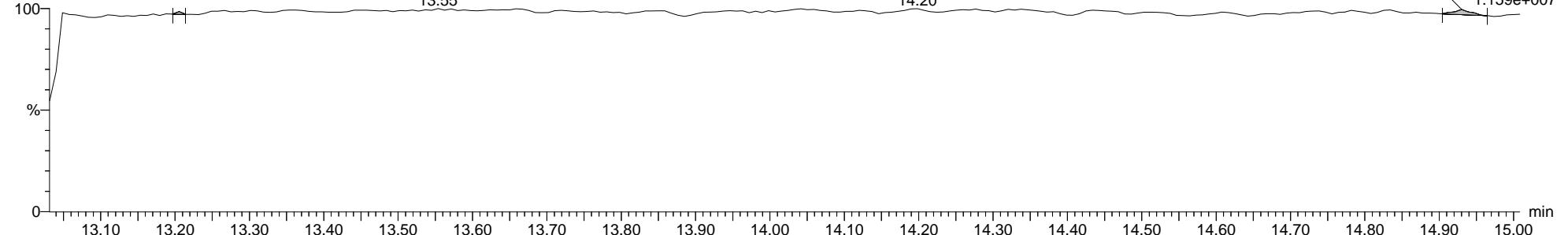
Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

**Name: 5-150917B06, Date: 17-Sep-2015, Time: 18:44:53, ID: H5-15-CS2-011, Description: 1668A-CS#2-015, Vial: Tray1:4****PCB-15**5-150917B06 Smooth(Mn,1x1)  
1668A-CS#2-015 H5-15-CS2-0115-150917B06 Smooth(Mn,1x1)  
1668A-CS#2-015 H5-15-CS2-0115-150917B06 Smooth(Mn,1x1)  
1668A-CS#2-015 H5-15-CS2-011

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

**Name: 5-150917B06, Date: 17-Sep-2015, Time: 18:44:53, ID: H5-15-CS2-011, Description: 1668A-CS#2-015, Vial: Tray1:4****13C-PCB-15**5-150917B06 Smooth(Mn,1x1)  
1668A-CS#2-015 H5-15-CS2-011F2:Voltage SIR,EI+  
234.0406  
3.459e+0075-150917B06 Smooth(Mn,1x1)  
1668A-CS#2-015 H5-15-CS2-011F2:Voltage SIR,EI+  
236.0376  
2.190e+0075-150917B06 Smooth(Mn,1x1)  
1668A-CS#2-015 H5-15-CS2-011F2:Voltage SIR,EI+  
242.9856  
14.93;6842.52;280401  
1.159e+007

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

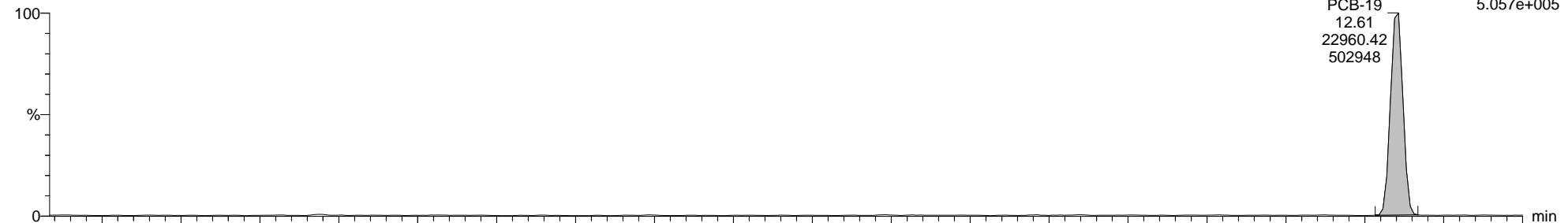
Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

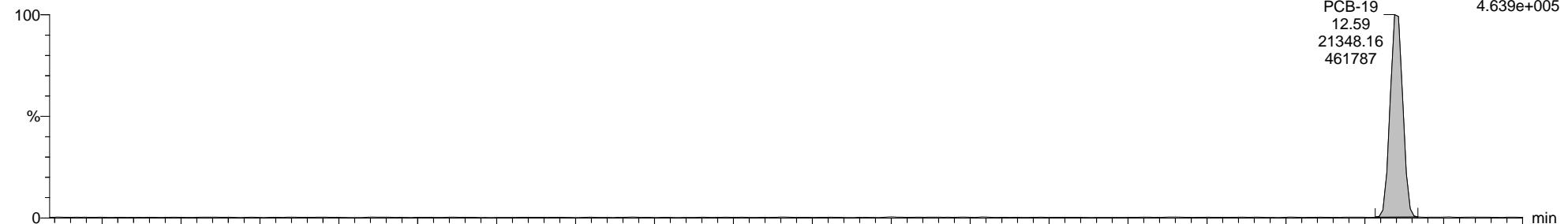
Name: 5-150917B06, Date: 17-Sep-2015, Time: 18:44:53, ID: H5-15-CS2-011, Description: 1668A-CS#2-015, Vial: Tray1:4

### PCB-19

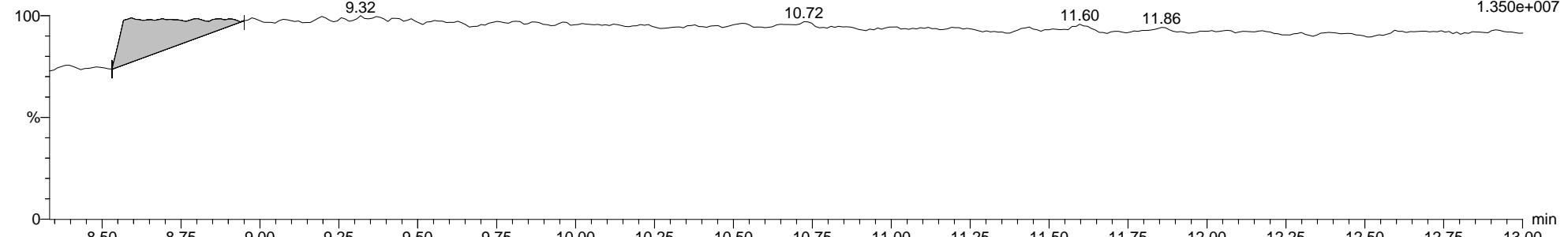
5-150917B06 Smooth(Mn,1x1)  
1668A-CS#2-015 H5-15-CS2-011



5-150917B06 Smooth(Mn,1x1)  
1668A-CS#2-015 H5-15-CS2-011



5-150917B06 Smooth(Mn,1x1)  
1668A-CS#2-015 H5-15-CS2-011

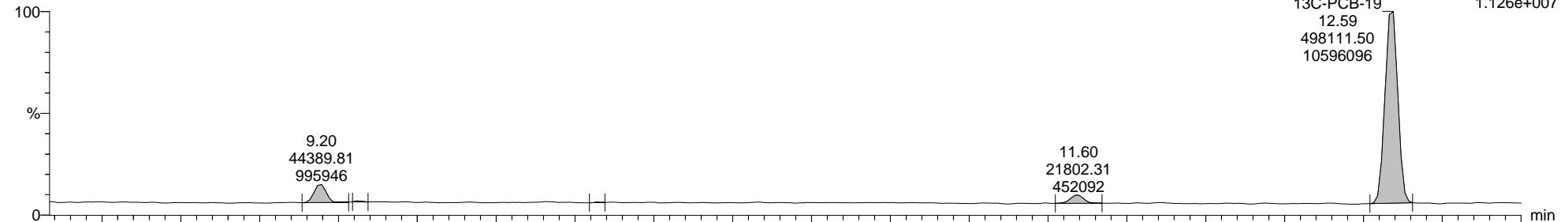
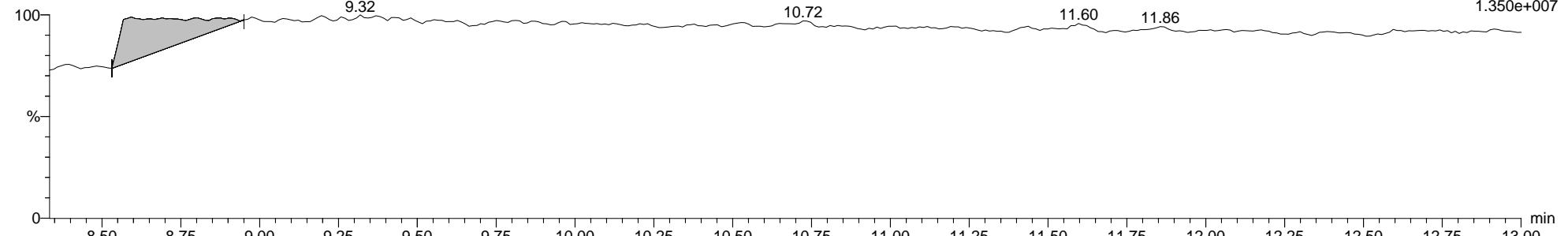


Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Name: 5-150917B06, Date: 17-Sep-2015, Time: 18:44:53, ID: H5-15-CS2-011, Description: 1668A-CS#2-015, Vial: Tray1:4

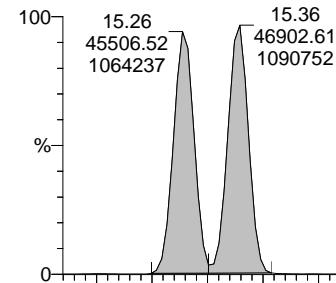
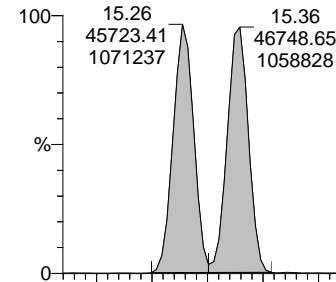
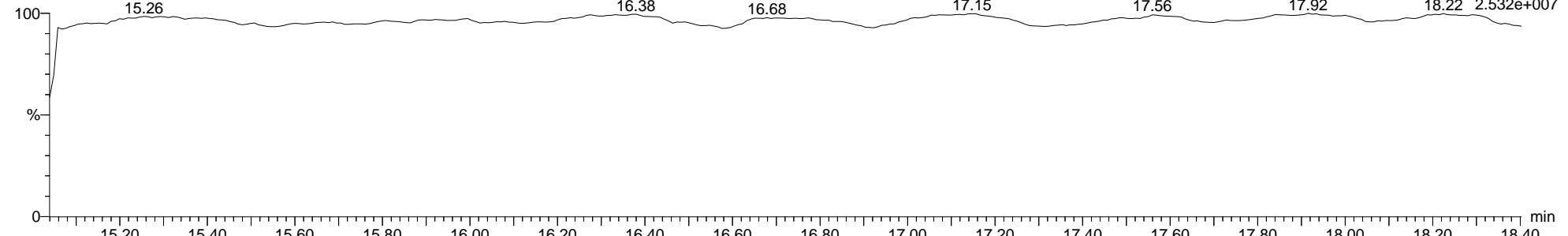
**13C-PCB-19**5-150917B06 Smooth(Mn,1x1)  
1668A-CS#2-015 H5-15-CS2-0115-150917B06 Smooth(Mn,1x1)  
1668A-CS#2-015 H5-15-CS2-0115-150917B06 Smooth(Mn,1x1)  
1668A-CS#2-015 H5-15-CS2-011

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Name: 5-150917B06, Date: 17-Sep-2015, Time: 18:44:53, ID: H5-15-CS2-011, Description: 1668A-CS#2-015, Vial: Tray1:4

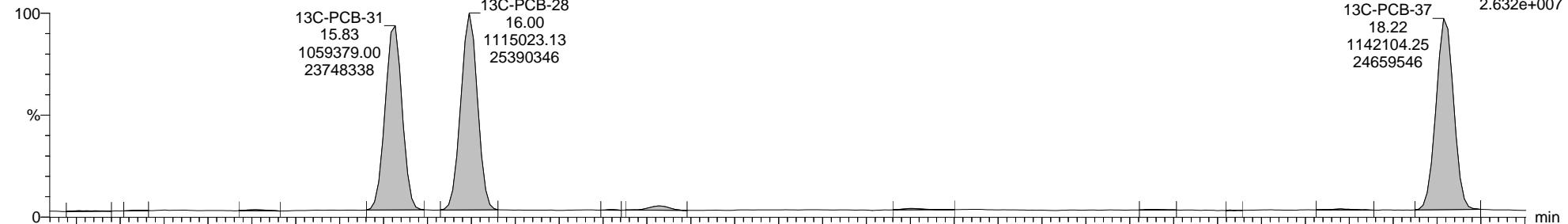
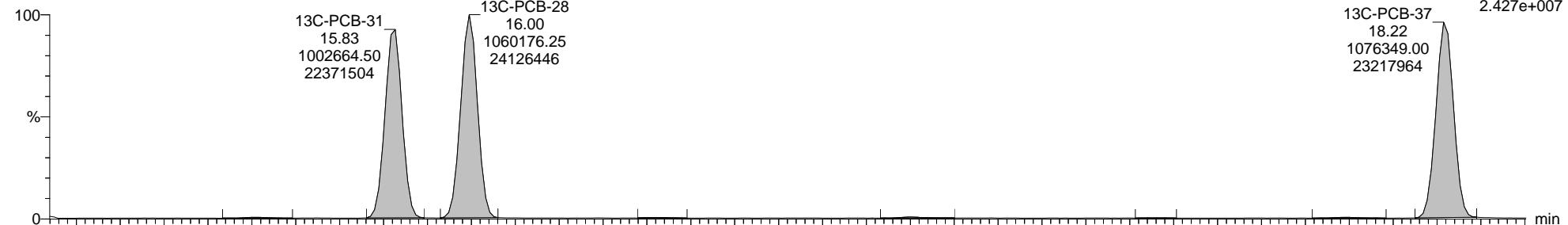
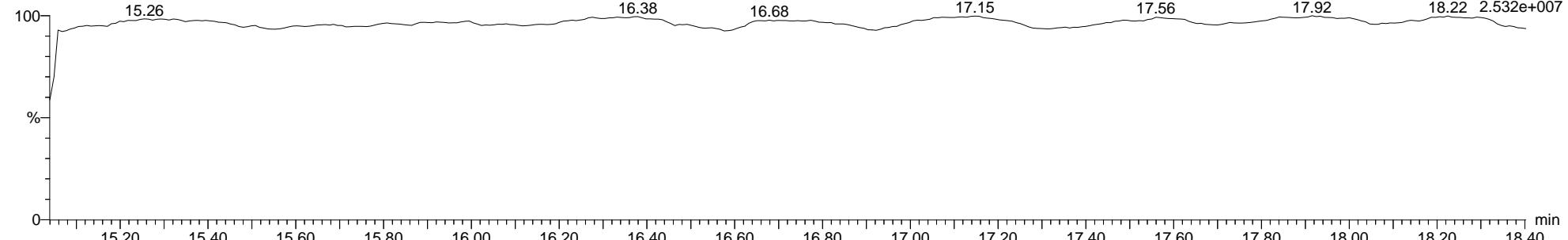
**PCB-37**5-150917B06 Smooth(Mn,1x1)  
1668A-CS#2-015 H5-15-CS2-011F3:Voltage SIR,EI+  
255.9613  
PCB-37 1.136e+0065-150917B06 Smooth(Mn,1x1)  
1668A-CS#2-015 H5-15-CS2-011F3:Voltage SIR,EI+  
257.9584  
PCB-37 1.113e+0065-150917B06 Smooth(Mn,1x1)  
1668A-CS#2-015 H5-15-CS2-011F3:Voltage SIR,EI+  
280.9825  
PCB-37 2.532e+007

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

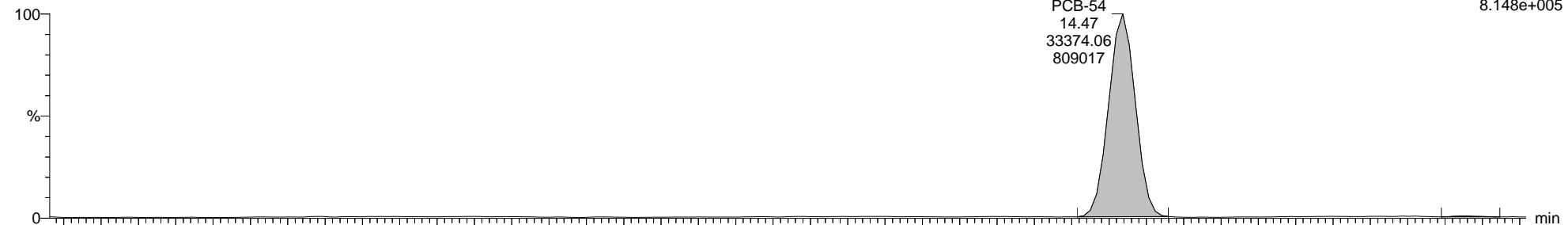
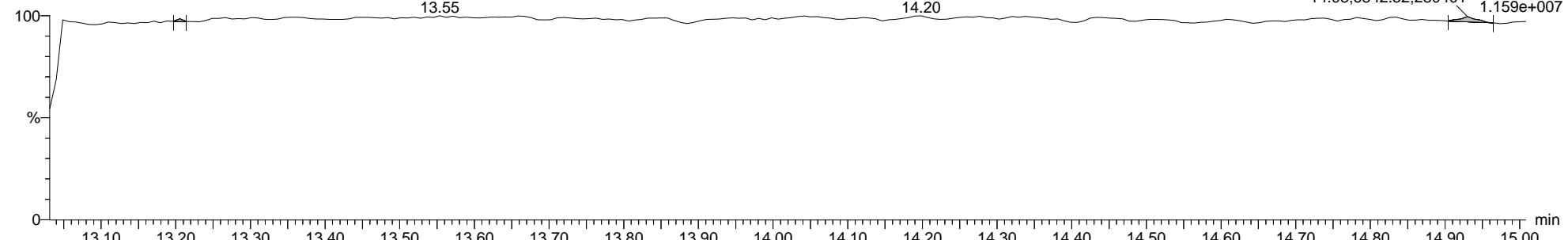
Name: 5-150917B06, Date: 17-Sep-2015, Time: 18:44:53, ID: H5-15-CS2-011, Description: 1668A-CS#2-015, Vial: Tray1:4

**13C-PCB-37**5-150917B06 Smooth(Mn,1x1)  
1668A-CS#2-015 H5-15-CS2-0115-150917B06 Smooth(Mn,1x1)  
1668A-CS#2-015 H5-15-CS2-0115-150917B06 Smooth(Mn,1x1)  
1668A-CS#2-015 H5-15-CS2-011

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

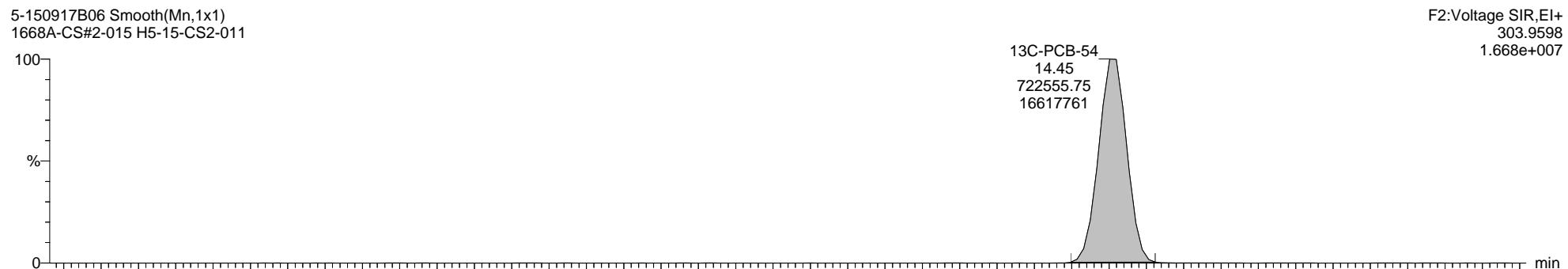
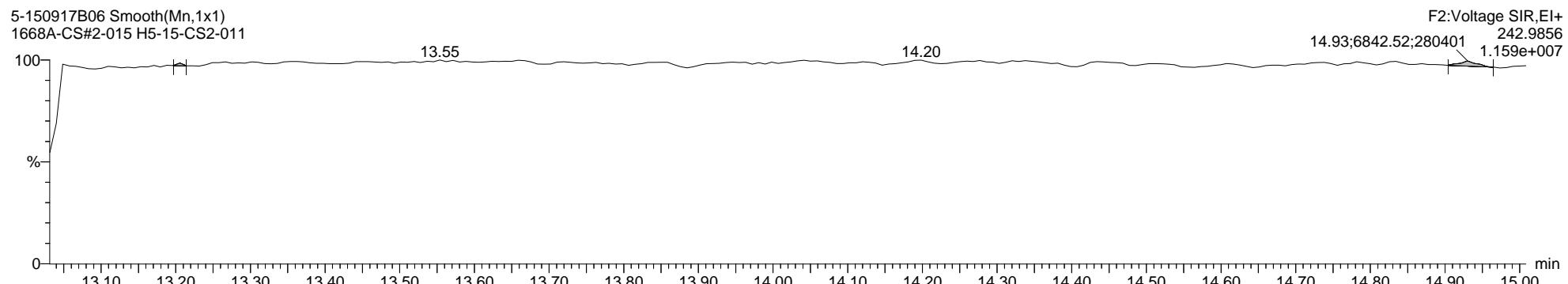
Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

**Name: 5-150917B06, Date: 17-Sep-2015, Time: 18:44:53, ID: H5-15-CS2-011, Description: 1668A-CS#2-015, Vial: Tray1:4****PCB-54**5-150917B06 Smooth(Mn,1x1)  
1668A-CS#2-015 H5-15-CS2-0115-150917B06 Smooth(Mn,1x1)  
1668A-CS#2-015 H5-15-CS2-0115-150917B06 Smooth(Mn,1x1)  
1668A-CS#2-015 H5-15-CS2-011

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

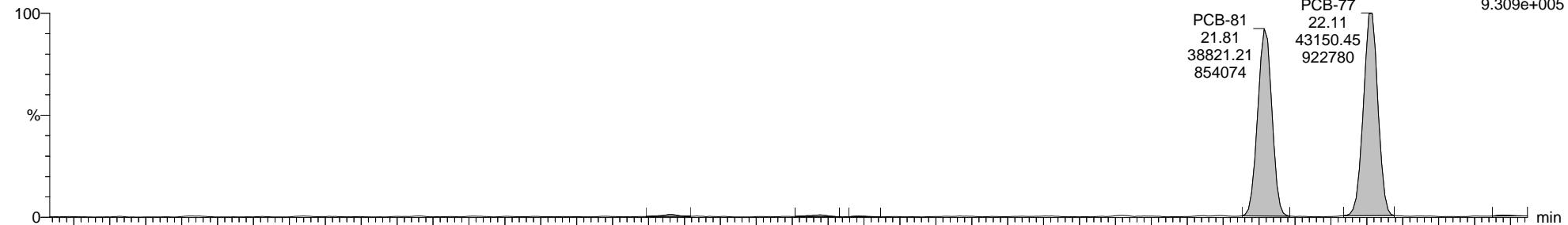
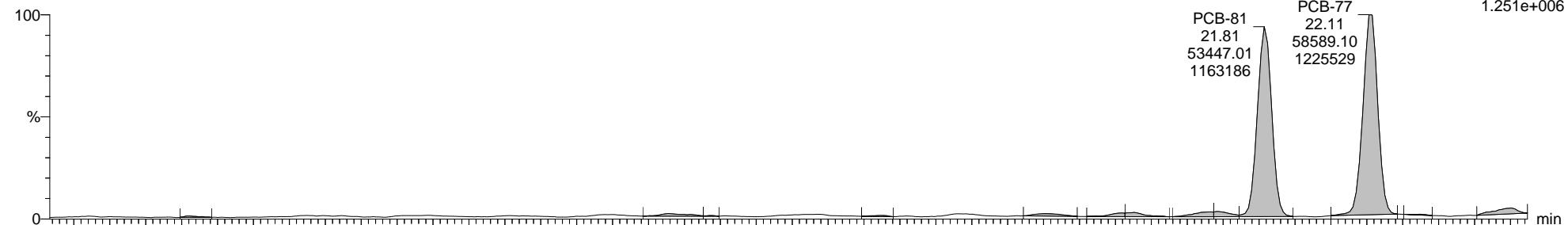
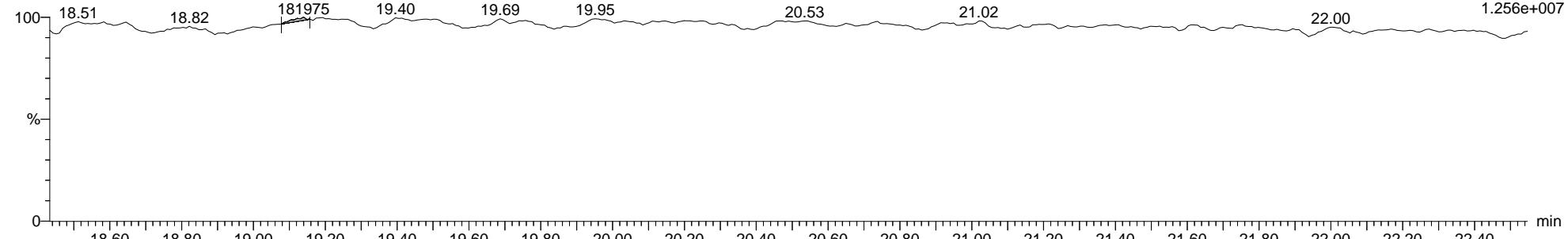
**Name: 5-150917B06, Date: 17-Sep-2015, Time: 18:44:53, ID: H5-15-CS2-011, Description: 1668A-CS#2-015, Vial: Tray1:4****13C-PCB-54**5-150917B06 Smooth(Mn,1x1)  
1668A-CS#2-015 H5-15-CS2-0115-150917B06 Smooth(Mn,1x1)  
1668A-CS#2-015 H5-15-CS2-0115-150917B06 Smooth(Mn,1x1)  
1668A-CS#2-015 H5-15-CS2-011

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Name: 5-150917B06, Date: 17-Sep-2015, Time: 18:44:53, ID: H5-15-CS2-011, Description: 1668A-CS#2-015, Vial: Tray1:4

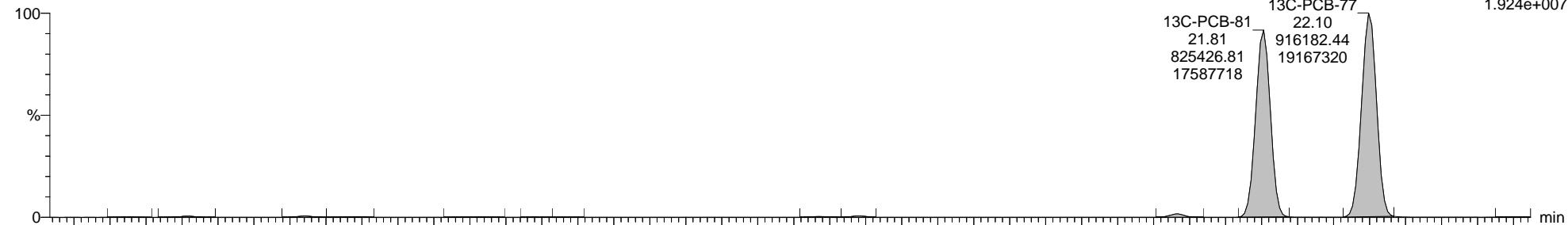
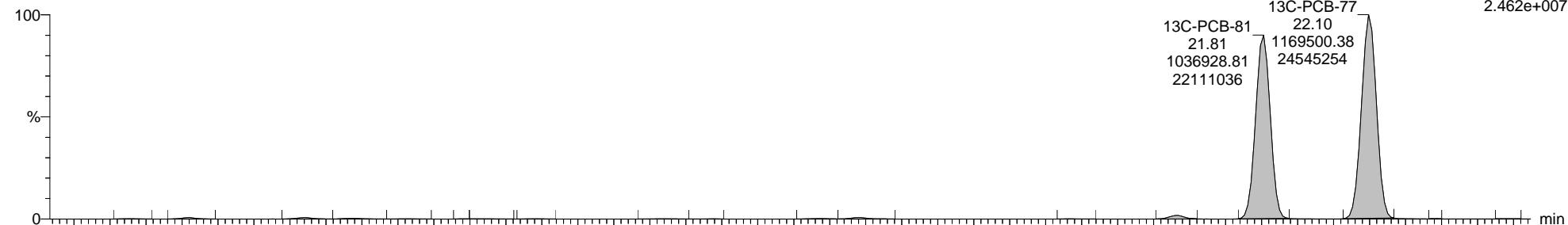
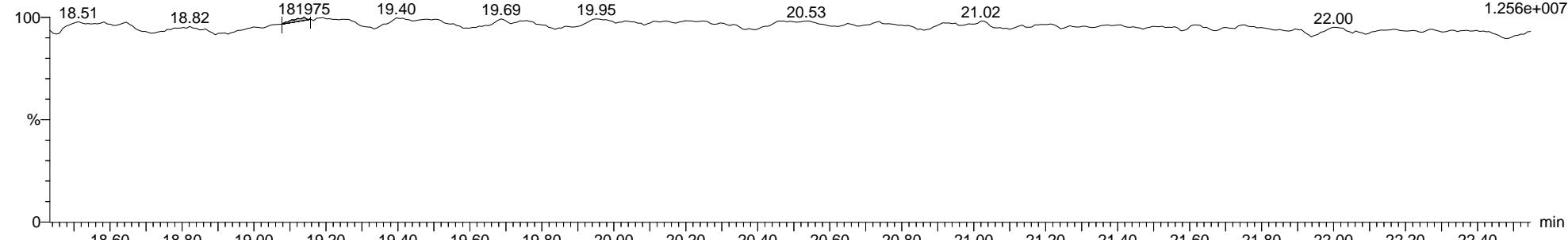
**PCB-81**5-150917B06 Smooth(Mn,1x1)  
1668A-CS#2-015 H5-15-CS2-0115-150917B06 Smooth(Mn,1x1)  
1668A-CS#2-015 H5-15-CS2-0115-150917B06 Smooth(Mn,1x1)  
1668A-CS#2-015 H5-15-CS2-011

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Name: 5-150917B06, Date: 17-Sep-2015, Time: 18:44:53, ID: H5-15-CS2-011, Description: 1668A-CS#2-015, Vial: Tray1:4

**13C-PCB-81**5-150917B06 Smooth(Mn,1x1)  
1668A-CS#2-015 H5-15-CS2-0115-150917B06 Smooth(Mn,1x1)  
1668A-CS#2-015 H5-15-CS2-0115-150917B06 Smooth(Mn,1x1)  
1668A-CS#2-015 H5-15-CS2-011

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

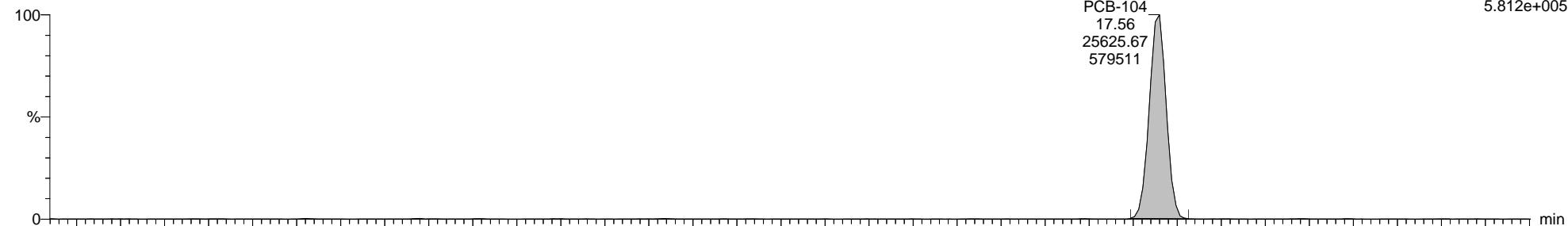
Name: 5-150917B06, Date: 17-Sep-2015, Time: 18:44:53, ID: H5-15-CS2-011, Description: 1668A-CS#2-015, Vial: Tray1:4

#### PCB-104

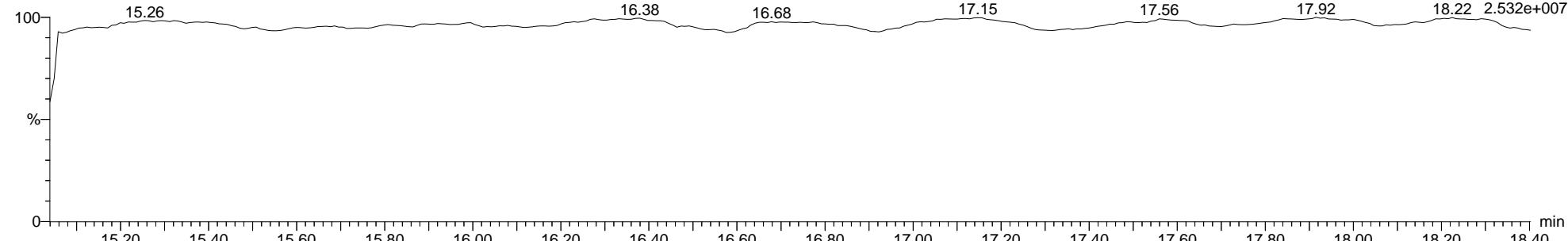
5-150917B06 Smooth(Mn,1x1)  
1668A-CS#2-015 H5-15-CS2-011



5-150917B06 Smooth(Mn,1x1)  
1668A-CS#2-015 H5-15-CS2-011



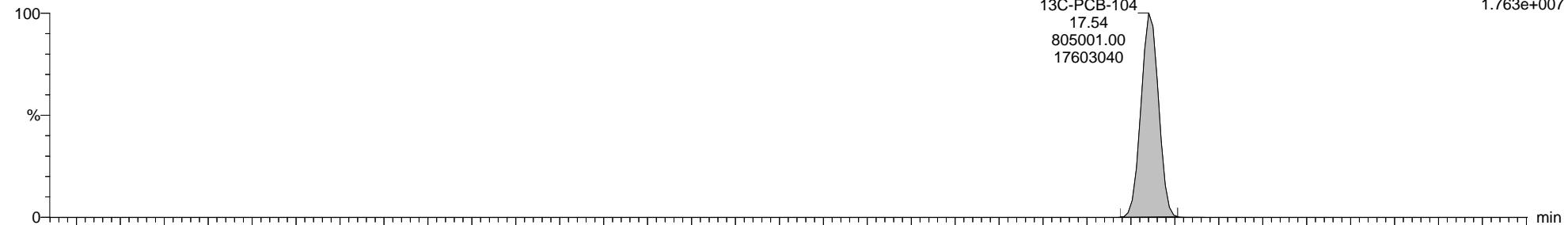
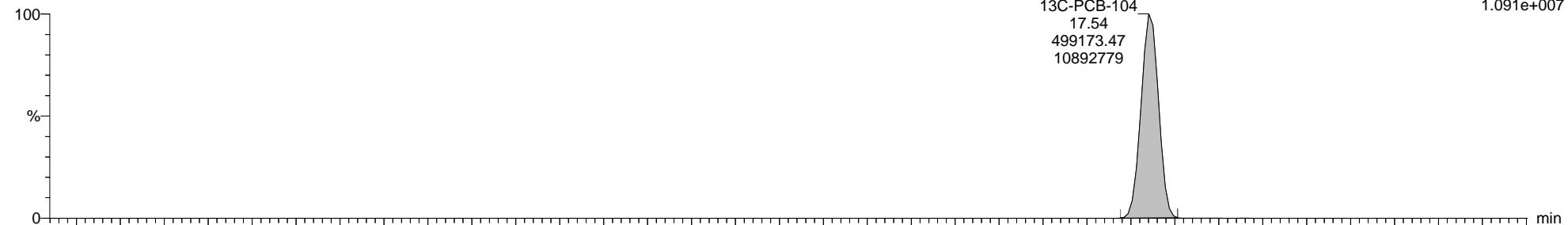
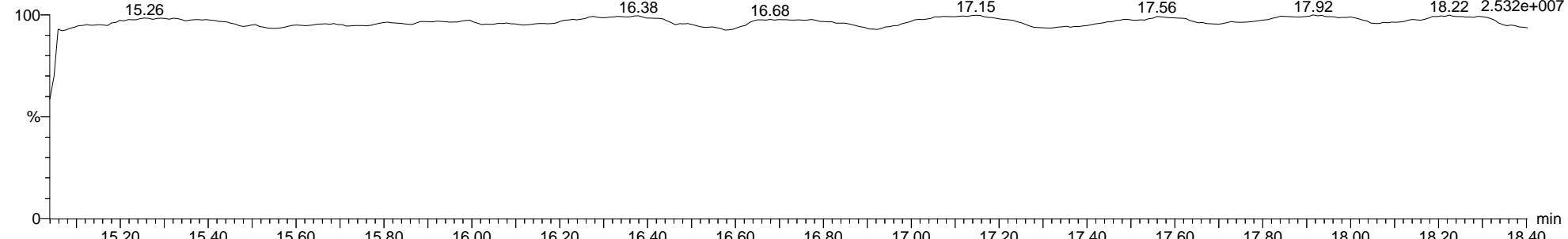
5-150917B06 Smooth(Mn,1x1)  
1668A-CS#2-015 H5-15-CS2-011



Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

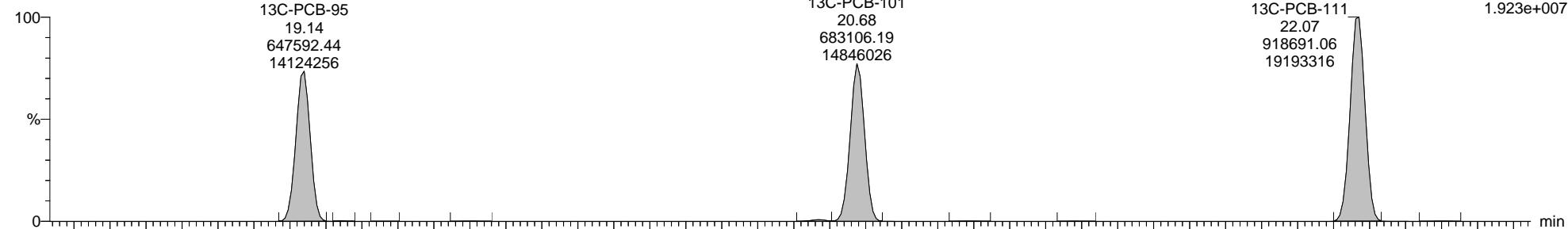
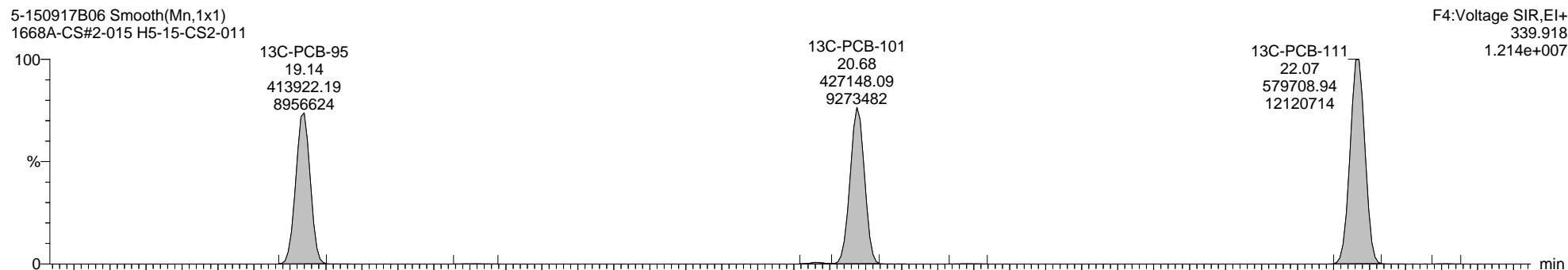
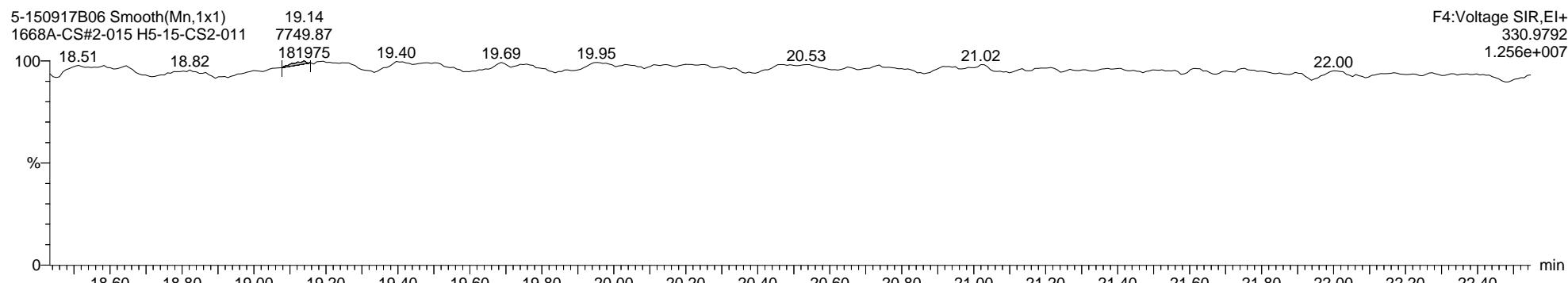
**Name: 5-150917B06, Date: 17-Sep-2015, Time: 18:44:53, ID: H5-15-CS2-011, Description: 1668A-CS#2-015, Vial: Tray1:4****13C-PCB-104**5-150917B06 Smooth(Mn,1x1)  
1668A-CS#2-015 H5-15-CS2-0115-150917B06 Smooth(Mn,1x1)  
1668A-CS#2-015 H5-15-CS2-0115-150917B06 Smooth(Mn,1x1)  
1668A-CS#2-015 H5-15-CS2-011

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Name: 5-150917B06, Date: 17-Sep-2015, Time: 18:44:53, ID: H5-15-CS2-011, Description: 1668A-CS#2-015, Vial: Tray1:4

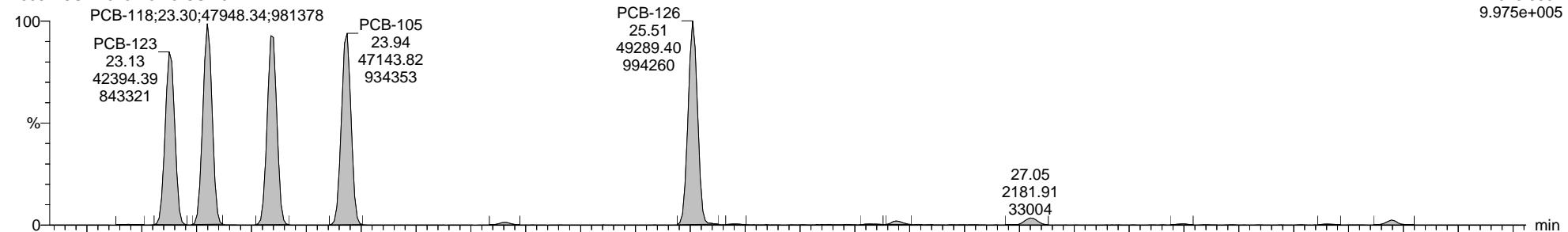
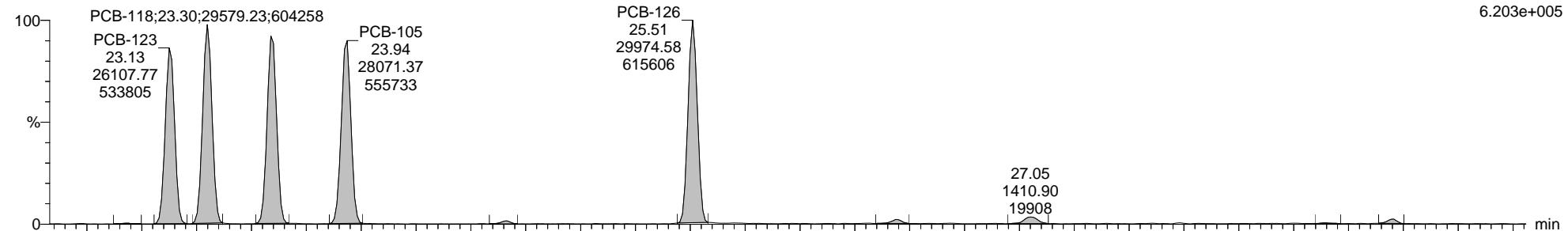
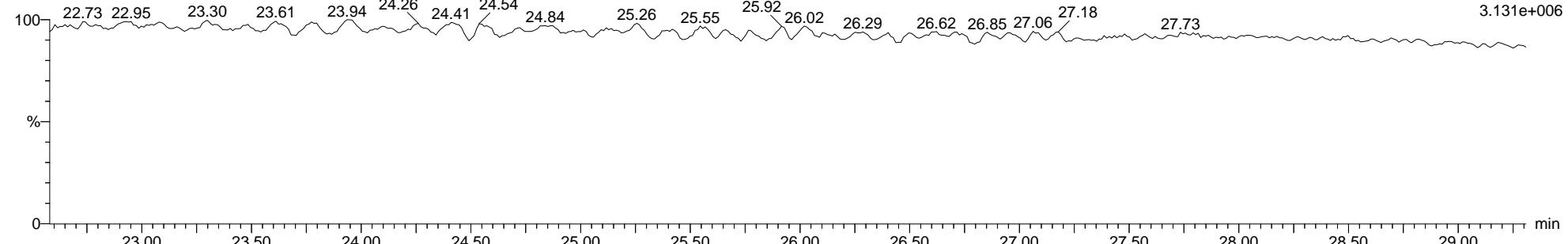
**13C-PCB-111**5-150917B06 Smooth(Mn,1x1)  
1668A-CS#2-015 H5-15-CS2-0115-150917B06 Smooth(Mn,1x1)  
1668A-CS#2-015 H5-15-CS2-0115-150917B06 Smooth(Mn,1x1)  
1668A-CS#2-015 H5-15-CS2-011

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Name: 5-150917B06, Date: 17-Sep-2015, Time: 18:44:53, ID: H5-15-CS2-011, Description: 1668A-CS#2-015, Vial: Tray1:4

**PCB-123**5-150917B06 Smooth(Mn,1x1)  
1668A-CS#2-015 H5-15-CS2-0115-150917B06 Smooth(Mn,1x1)  
1668A-CS#2-015 H5-15-CS2-0115-150917B06 Smooth(Mn,1x1)  
1668A-CS#2-015 H5-15-CS2-011

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Name: 5-150917B06, Date: 17-Sep-2015, Time: 18:44:53, ID: H5-15-CS2-011, Description: 1668A-CS#2-015, Vial: Tray1:4

**13C-PCB-123**

5-150917B06 Smooth(Mn,1x1)

1668A-CS#2-015 H5-15-CS2-011

13C-PCB-118;23.29;1033553.56;20686750

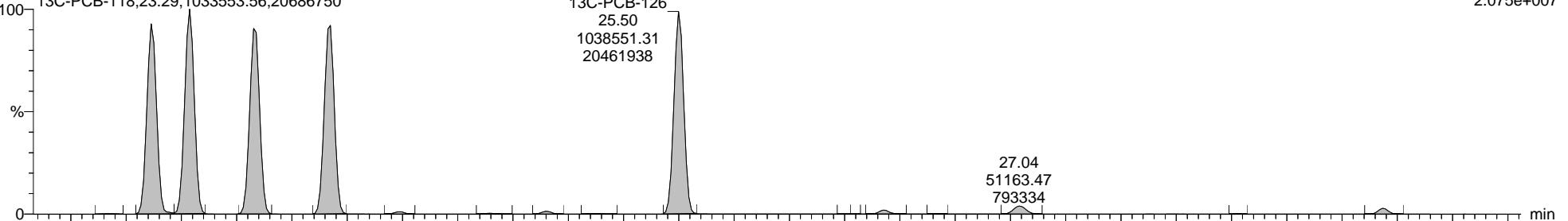
13C-PCB-126

25.50  
1038551.31  
20461938

F5:Voltage SIR,EI+

337.9207

2.075e+007



5-150917B06 Smooth(Mn,1x1)

1668A-CS#2-015 H5-15-CS2-011

13C-PCB-118;23.29;646592.75;12899580

13C-PCB-105

23.92  
627601.81  
11906335

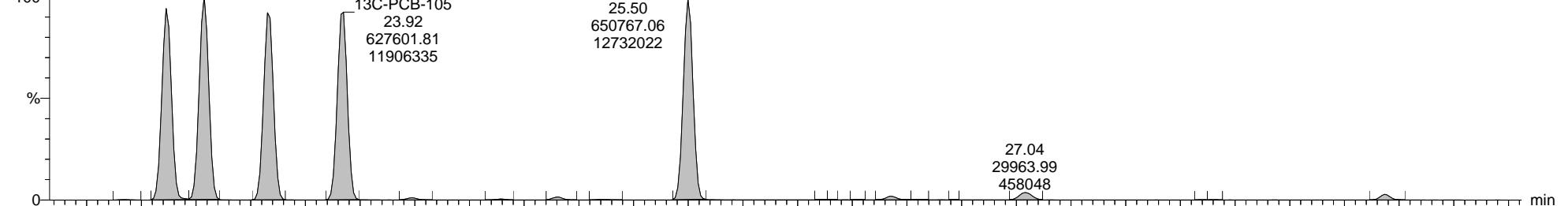
13C-PCB-126

25.50  
650767.06  
12732022

F5:Voltage SIR,EI+

339.918

1.293e+007



5-150917B06 Smooth(Mn,1x1)

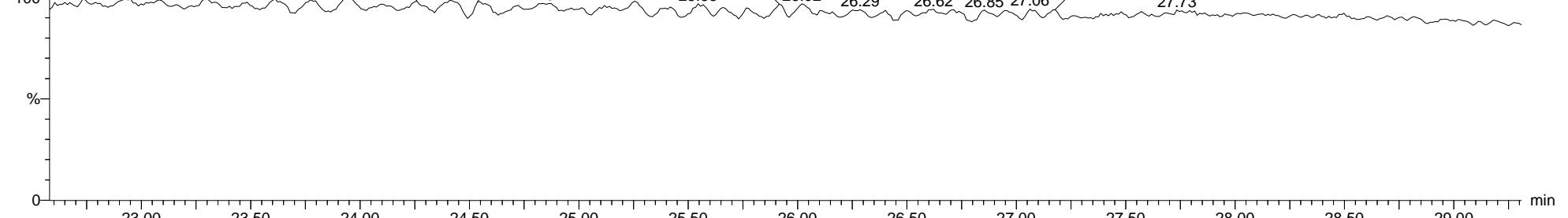
1668A-CS#2-015 H5-15-CS2-011

22.73 22.95 23.30 23.61 23.94 24.26 24.41 24.54 24.84 25.26 25.55 25.92 26.02 26.29 26.62 26.85 27.06 27.18 27.73

F5:Voltage SIR,EI+

354.9792

3.131e+006

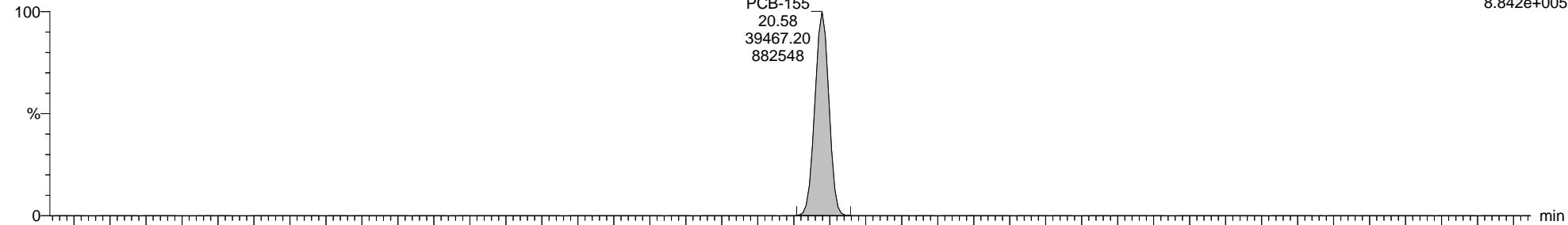
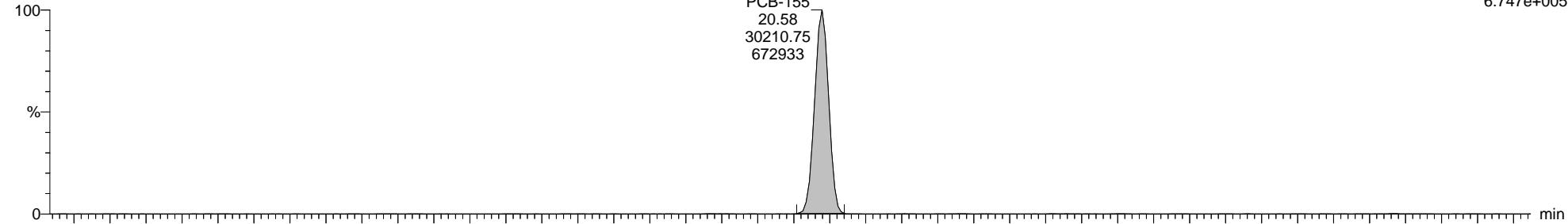
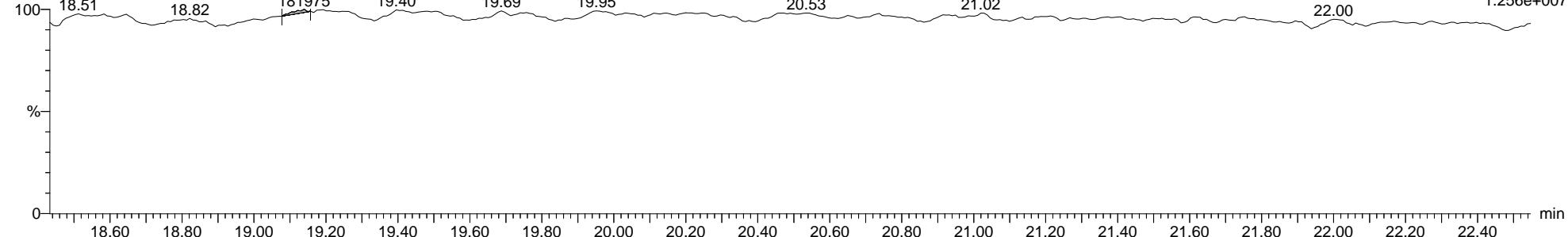


Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Name: 5-150917B06, Date: 17-Sep-2015, Time: 18:44:53, ID: H5-15-CS2-011, Description: 1668A-CS#2-015, Vial: Tray1:4

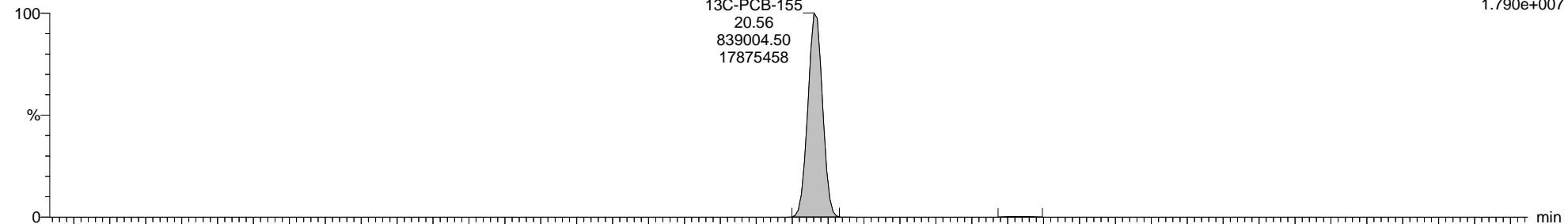
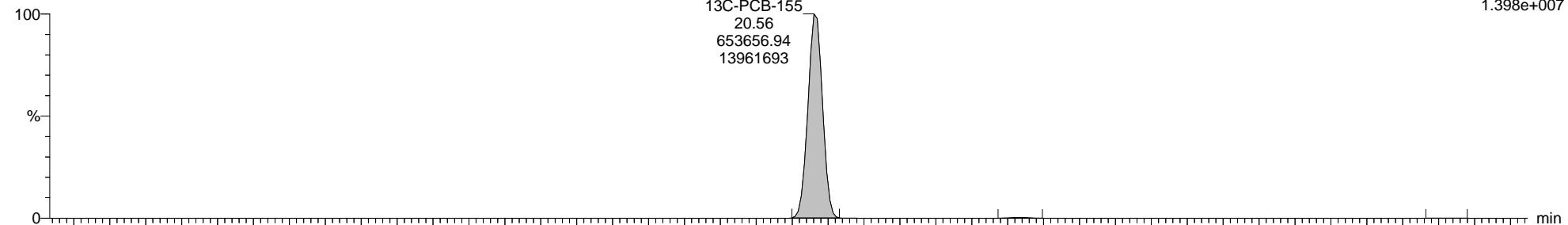
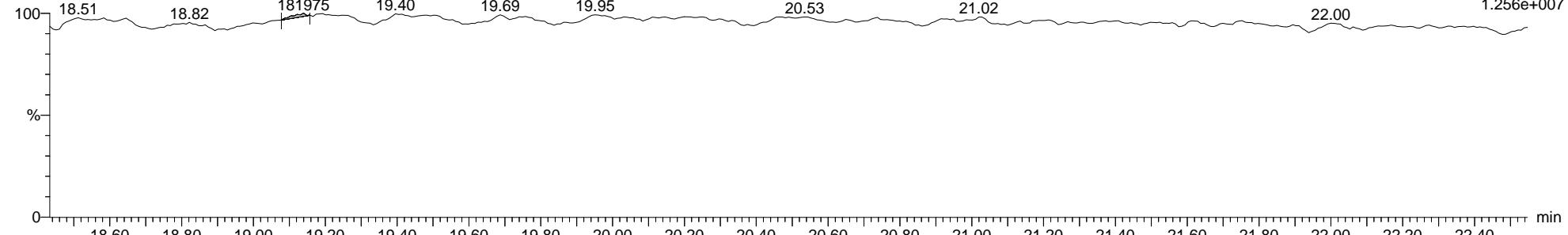
**PCB-155**5-150917B06 Smooth(Mn,1x1)  
1668A-CS#2-015 H5-15-CS2-0115-150917B06 Smooth(Mn,1x1)  
1668A-CS#2-015 H5-15-CS2-011F4:Voltage SIR,EI+  
361.8385  
6.747e+0055-150917B06 Smooth(Mn,1x1)  
1668A-CS#2-015 H5-15-CS2-011F4:Voltage SIR,EI+  
330.9792  
1.256e+007

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Name: 5-150917B06, Date: 17-Sep-2015, Time: 18:44:53, ID: H5-15-CS2-011, Description: 1668A-CS#2-015, Vial: Tray1:4

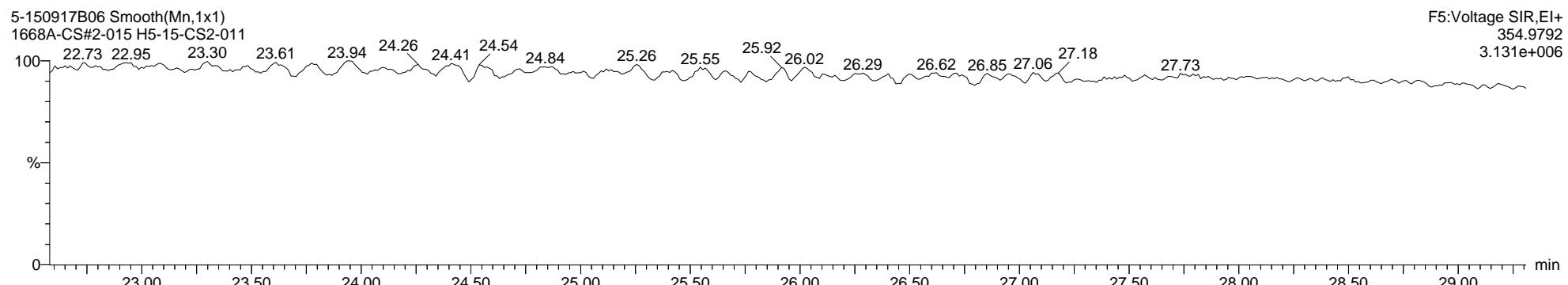
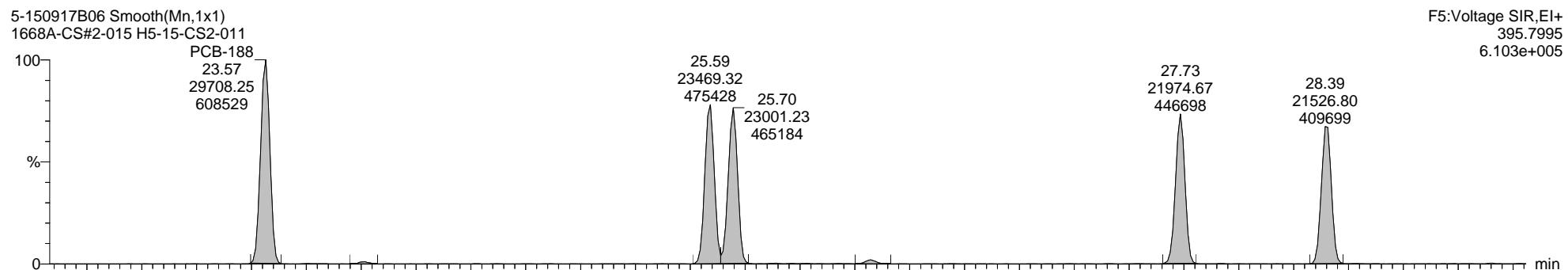
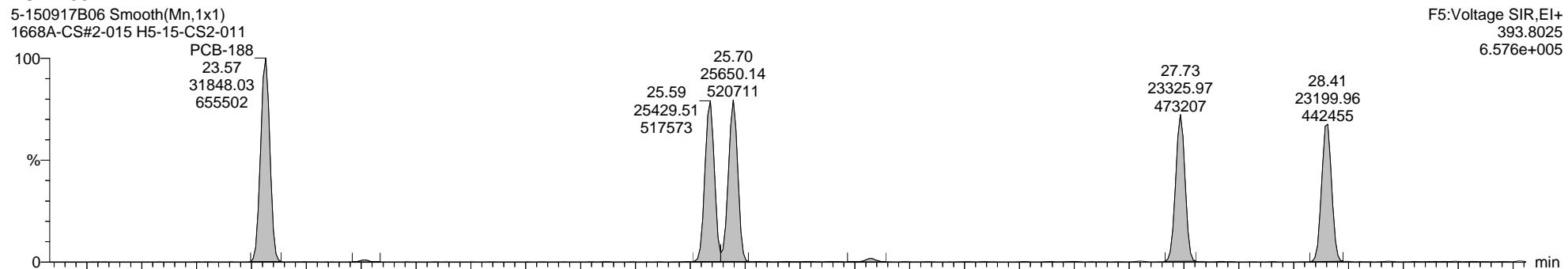
**13C-PCB-155**5-150917B06 Smooth(Mn,1x1)  
1668A-CS#2-015 H5-15-CS2-0115-150917B06 Smooth(Mn,1x1)  
1668A-CS#2-015 H5-15-CS2-0115-150917B06 Smooth(Mn,1x1)  
1668A-CS#2-015 H5-15-CS2-011

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Name: 5-150917B06, Date: 17-Sep-2015, Time: 18:44:53, ID: H5-15-CS2-011, Description: 1668A-CS#2-015, Vial: Tray1:4

**PCB-188**

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

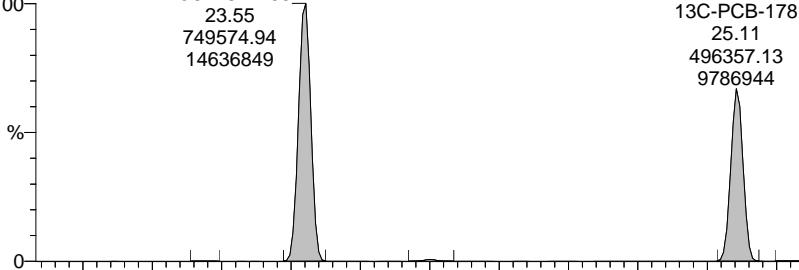
Name: 5-150917B06, Date: 17-Sep-2015, Time: 18:44:53, ID: H5-15-CS2-011, Description: 1668A-CS#2-015, Vial: Tray1:4

**13C-PCB-188**

5-150917B06 Smooth(Mn,1x1)

1668A-CS#2-015 H5-15-CS2-011

13C-PCB-188



F5:Voltage SIR,EI+

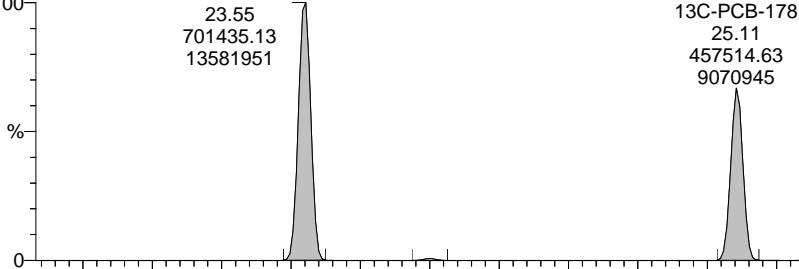
405.8428

1.465e+007

5-150917B06 Smooth(Mn,1x1)

1668A-CS#2-015 H5-15-CS2-011

13C-PCB-188



F5:Voltage SIR,EI+

407.8399

1.359e+007

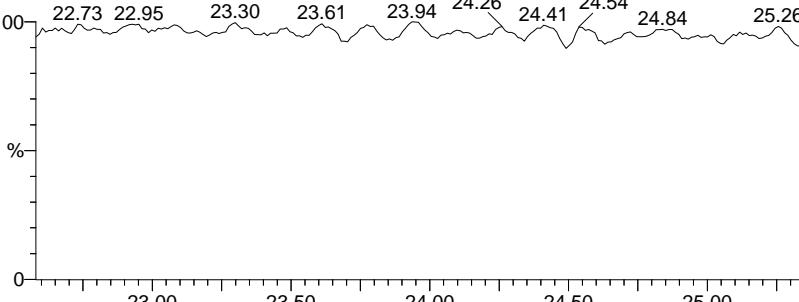
5-150917B06 Smooth(Mn,1x1)

1668A-CS#2-015 H5-15-CS2-011

F5:Voltage SIR,EI+

354.9792

3.131e+006



Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Name: 5-150917B06, Date: 17-Sep-2015, Time: 18:44:53, ID: H5-15-CS2-011, Description: 1668A-CS#2-015, Vial: Tray1:4

**PCB-189**

5-150917B06 Smooth(Mn,1x1)

1668A-CS#2-015 H5-15-CS2-011

PCB-189

29.98

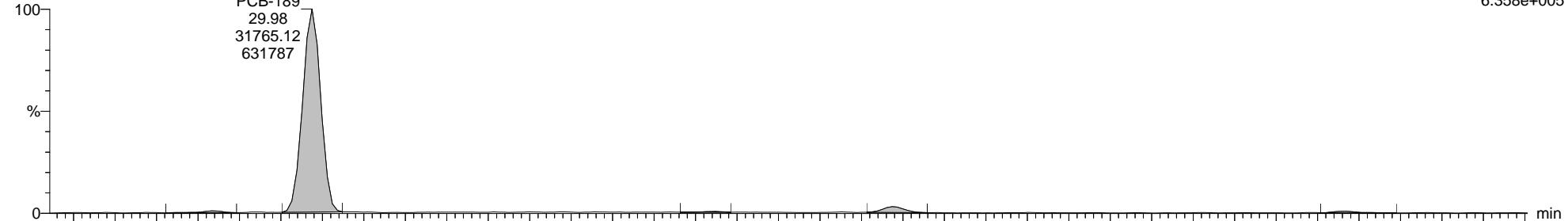
31765.12

631787

F6:Voltage SIR,EI+

393.8025

6.358e+005



5-150917B06 Smooth(Mn,1x1)

1668A-CS#2-015 H5-15-CS2-011

PCB-189

29.98

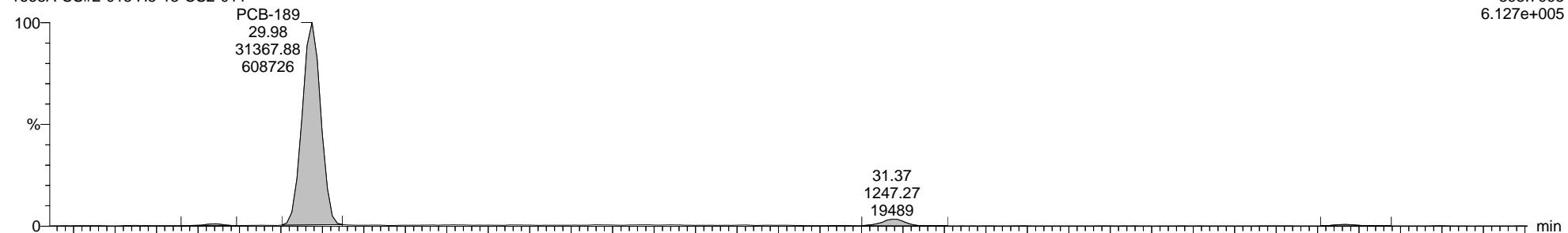
31367.88

608726

F6:Voltage SIR,EI+

395.7995

6.127e+005



5-150917B06 Smooth(Mn,1x1)

1668A-CS#2-015 H5-15-CS2-011

PCB-189

29.68

9151.77

118273

29.83

29.89

30.08

30.33

30.53

2093.92

34041

30.73

30.89

31.06

31.11

31.17

31.46

31.62

31.84

31.99

841.30

35729

32.12

32.29

32.42

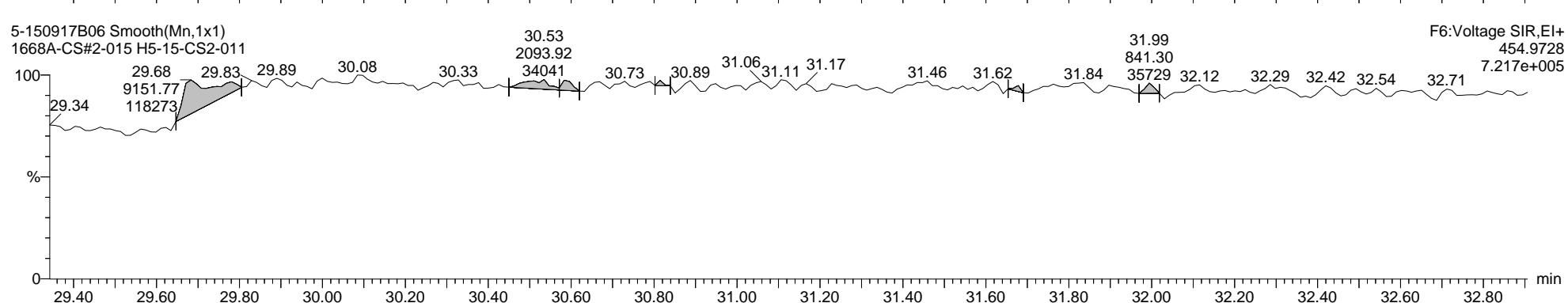
32.54

32.71

F6:Voltage SIR,EI+

454.9728

7.217e+005

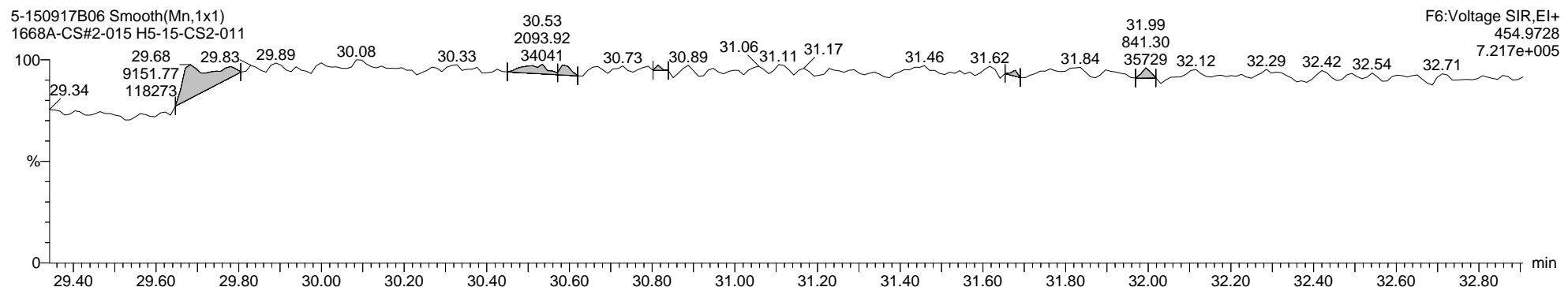
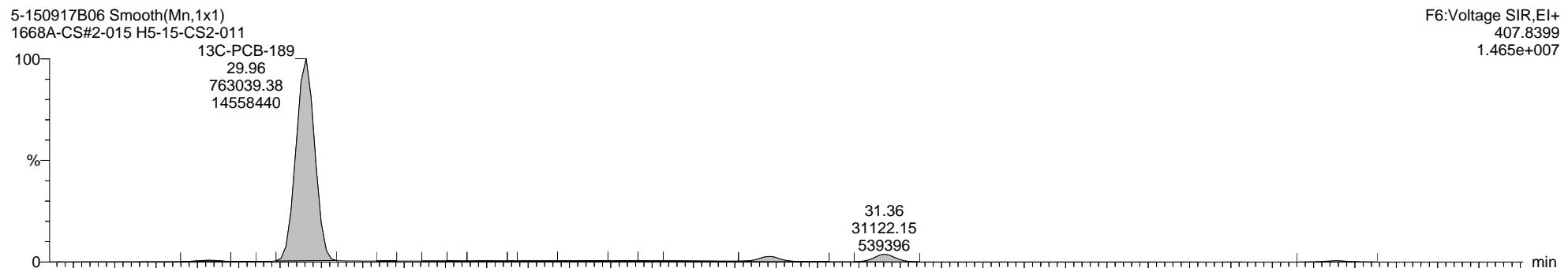
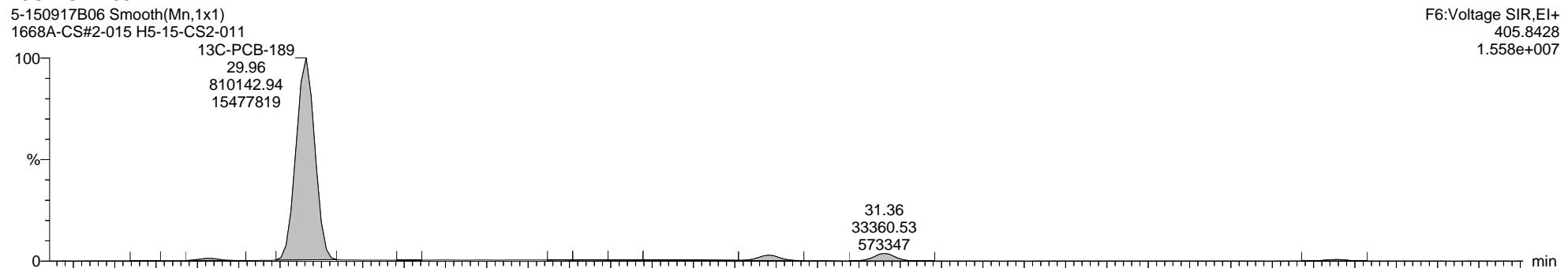


Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Name: 5-150917B06, Date: 17-Sep-2015, Time: 18:44:53, ID: H5-15-CS2-011, Description: 1668A-CS#2-015, Vial: Tray1:4

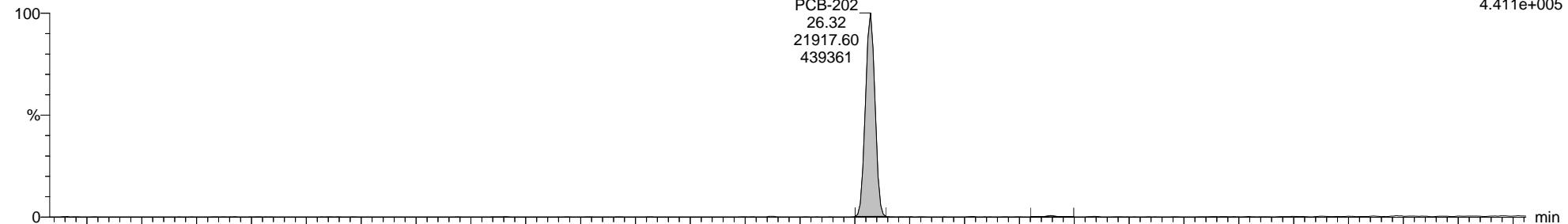
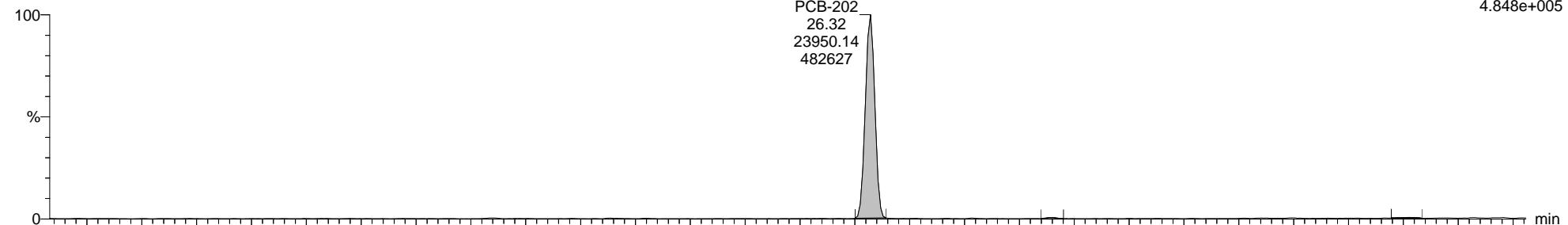
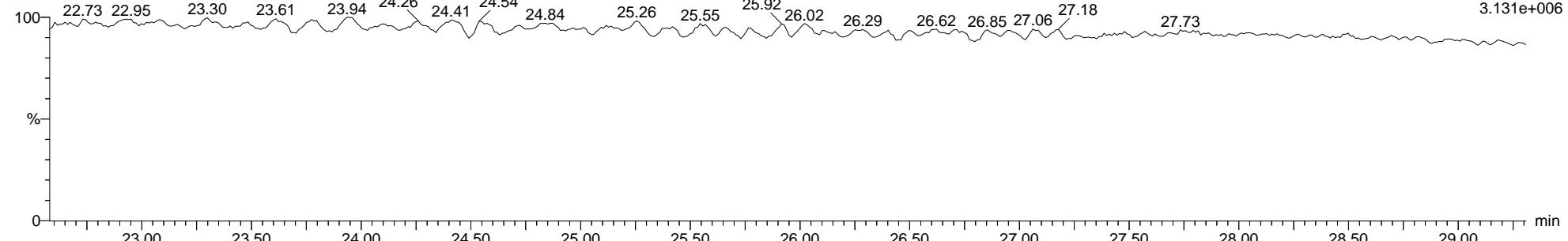
**13C-PCB-189**

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Name: 5-150917B06, Date: 17-Sep-2015, Time: 18:44:53, ID: H5-15-CS2-011, Description: 1668A-CS#2-015, Vial: Tray1:4

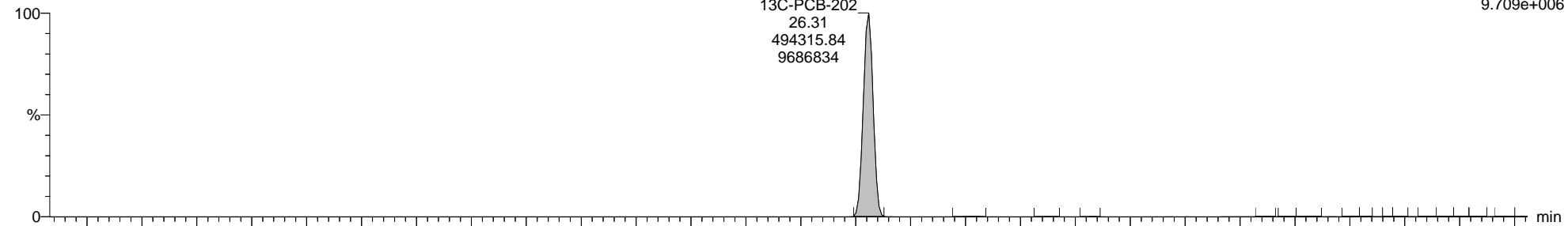
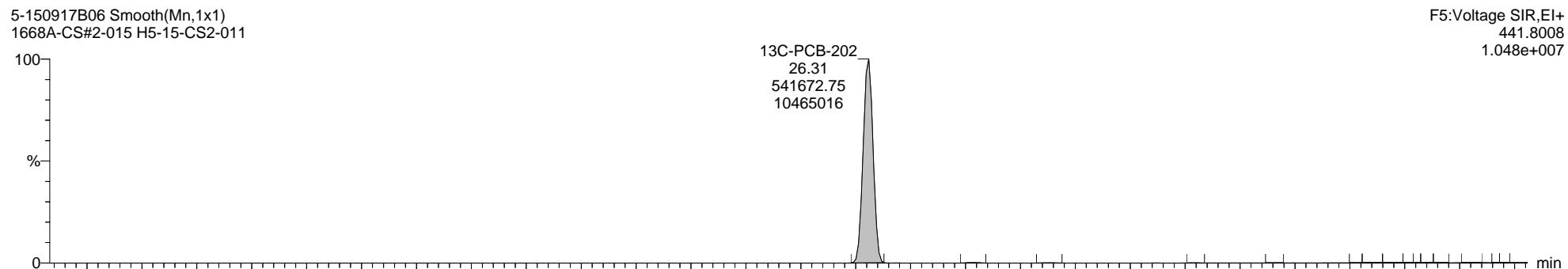
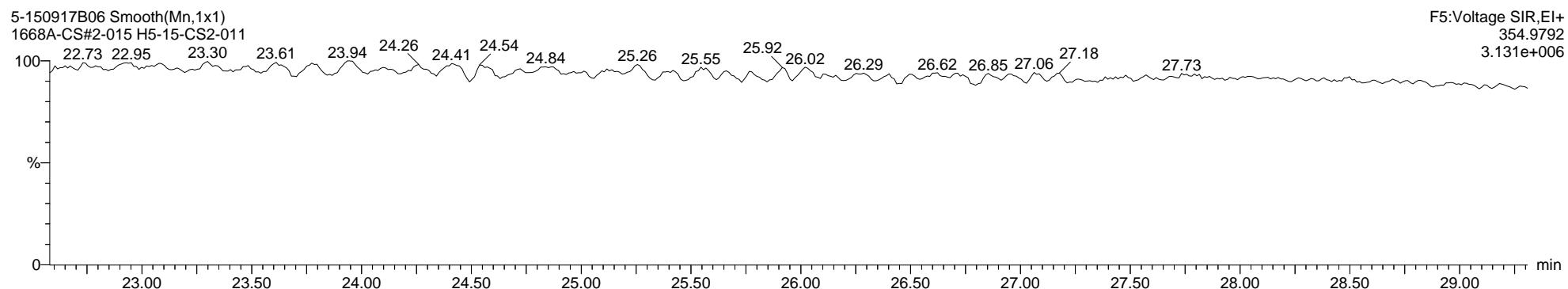
**PCB-202**5-150917B06 Smooth(Mn,1x1)  
1668A-CS#2-015 H5-15-CS2-0115-150917B06 Smooth(Mn,1x1)  
1668A-CS#2-015 H5-15-CS2-0115-150917B06 Smooth(Mn,1x1)  
1668A-CS#2-015 H5-15-CS2-011

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Name: 5-150917B06, Date: 17-Sep-2015, Time: 18:44:53, ID: H5-15-CS2-011, Description: 1668A-CS#2-015, Vial: Tray1:4

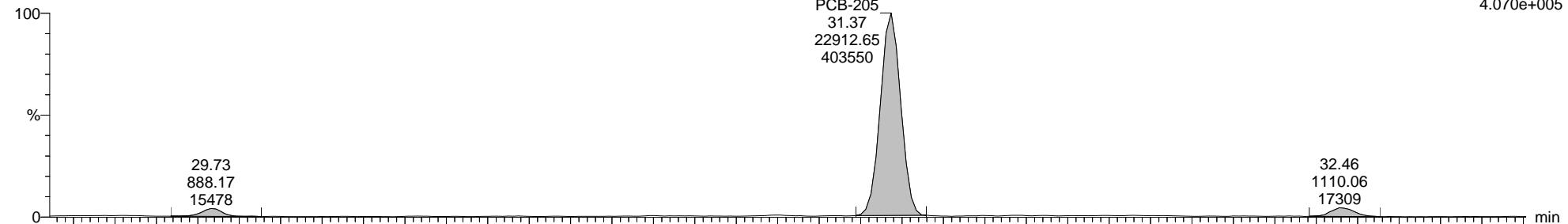
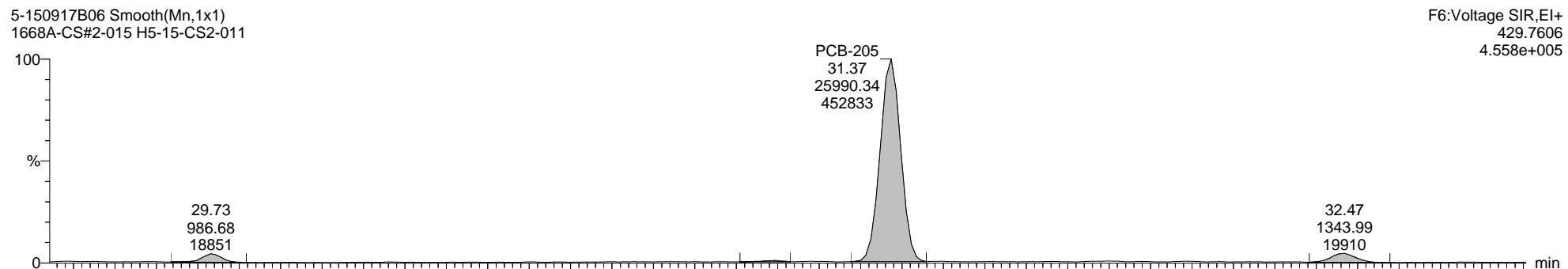
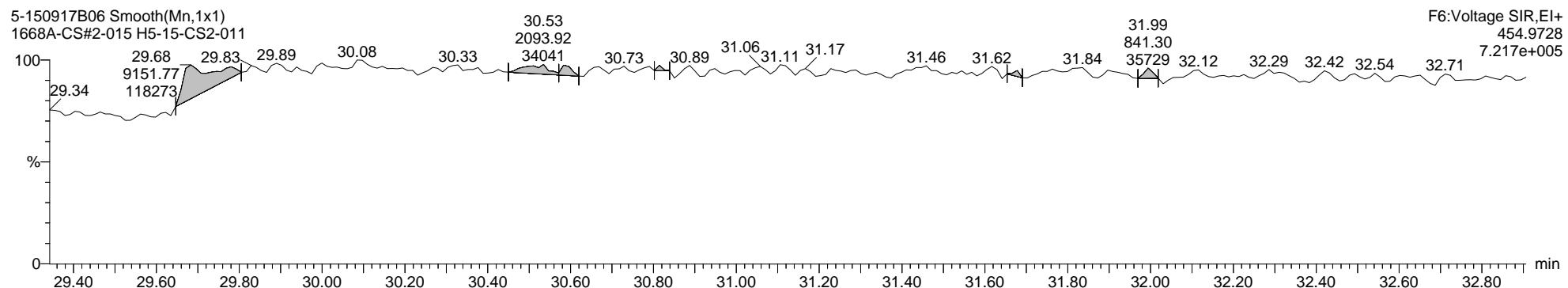
**13C-PCB-202**5-150917B06 Smooth(Mn,1x1)  
1668A-CS#2-015 H5-15-CS2-0115-150917B06 Smooth(Mn,1x1)  
1668A-CS#2-015 H5-15-CS2-0115-150917B06 Smooth(Mn,1x1)  
1668A-CS#2-015 H5-15-CS2-011

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Name: 5-150917B06, Date: 17-Sep-2015, Time: 18:44:53, ID: H5-15-CS2-011, Description: 1668A-CS#2-015, Vial: Tray1:4

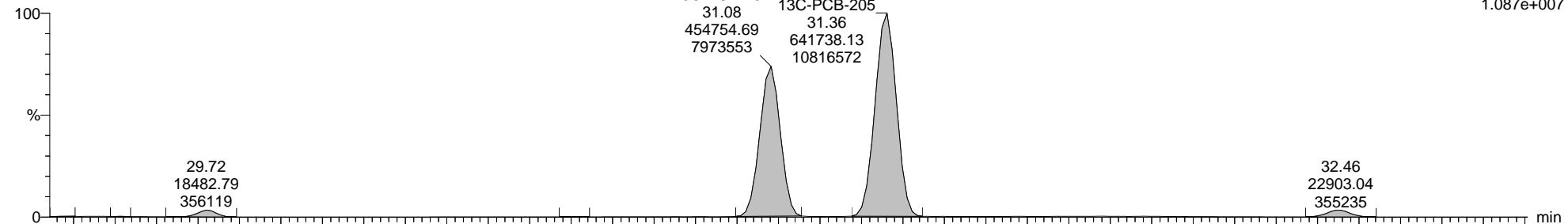
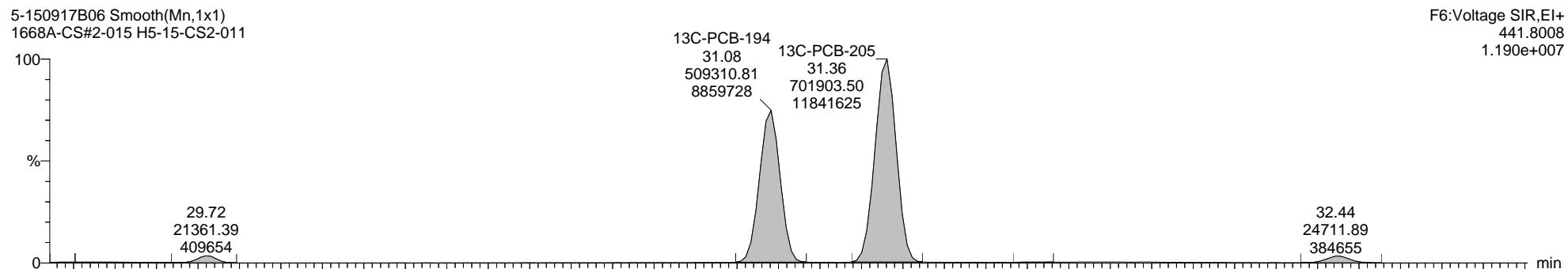
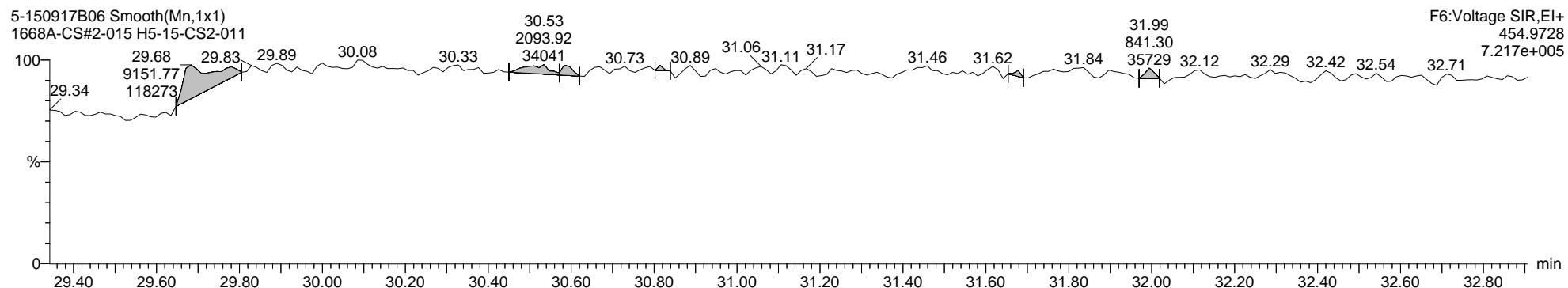
**PCB-205**5-150917B06 Smooth(Mn,1x1)  
1668A-CS#2-015 H5-15-CS2-0115-150917B06 Smooth(Mn,1x1)  
1668A-CS#2-015 H5-15-CS2-0115-150917B06 Smooth(Mn,1x1)  
1668A-CS#2-015 H5-15-CS2-011

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Name: 5-150917B06, Date: 17-Sep-2015, Time: 18:44:53, ID: H5-15-CS2-011, Description: 1668A-CS#2-015, Vial: Tray1:4

**13C-PCB-205**5-150917B06 Smooth(Mn,1x1)  
1668A-CS#2-015 H5-15-CS2-0115-150917B06 Smooth(Mn,1x1)  
1668A-CS#2-015 H5-15-CS2-0115-150917B06 Smooth(Mn,1x1)  
1668A-CS#2-015 H5-15-CS2-011

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

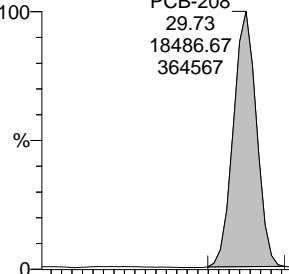
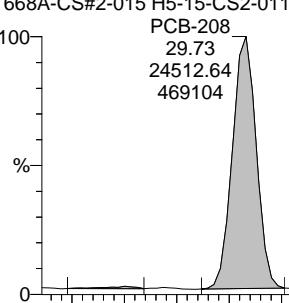
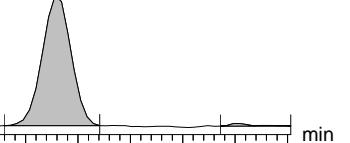
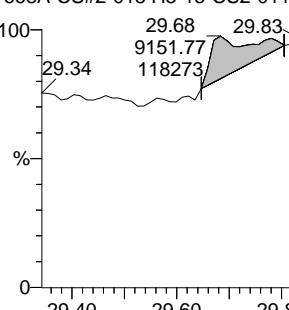
Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Name: 5-150917B06, Date: 17-Sep-2015, Time: 18:44:53, ID: H5-15-CS2-011, Description: 1668A-CS#2-015, Vial: Tray1:4

**PCB-208**5-150917B06 Smooth(Mn,1x1)  
1668A-CS#2-015 H5-15-CS2-011

PCB-208

29.73  
18486.67  
364567F6:Voltage SIR,EI+  
461.7246  
3.684e+005PCB-206  
32.46  
11690.40  
1862585-150917B06 Smooth(Mn,1x1)  
1668A-CS#2-015 H5-15-CS2-011PCB-208  
29.73  
24512.64  
469104F6:Voltage SIR,EI+  
463.7216  
4.800e+005PCB-206  
32.46  
15409.19  
2417145-150917B06 Smooth(Mn,1x1)  
1668A-CS#2-015 H5-15-CS2-01129.34  
9151.77  
118273  
29.68  
29.83  
29.89  
30.08  
30.33  
30.53  
2093.92  
34041  
30.73  
30.89  
31.06  
31.11  
31.17  
31.46  
31.62  
31.84  
31.99  
841.30  
35729  
32.12  
32.29  
32.42  
32.54  
32.71F6:Voltage SIR,EI+  
454.9728  
7.217e+005

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

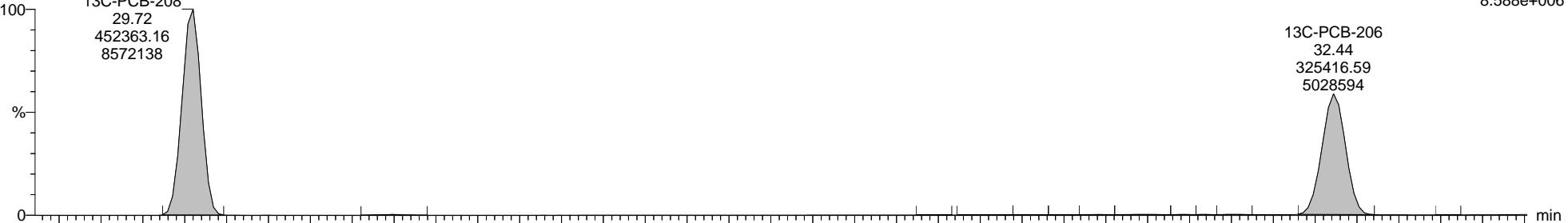
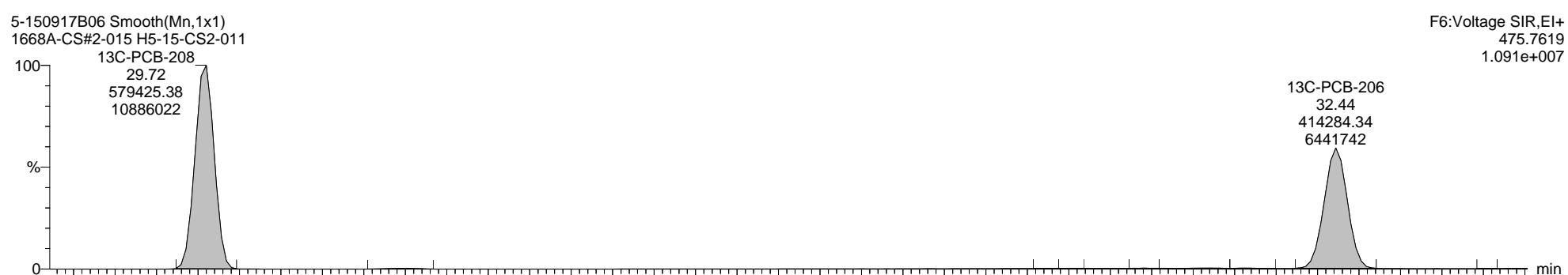
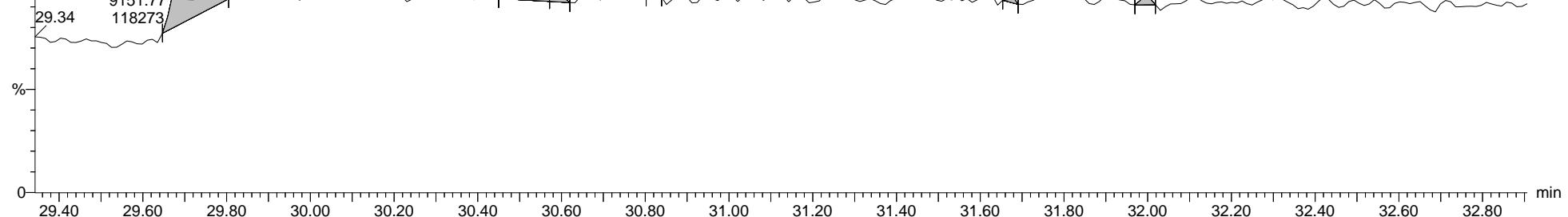
Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Name: 5-150917B06, Date: 17-Sep-2015, Time: 18:44:53, ID: H5-15-CS2-011, Description: 1668A-CS#2-015, Vial: Tray1:4

**13C-PCB-208**5-150917B06 Smooth(Mn,1x1)  
1668A-CS#2-015 H5-15-CS2-011

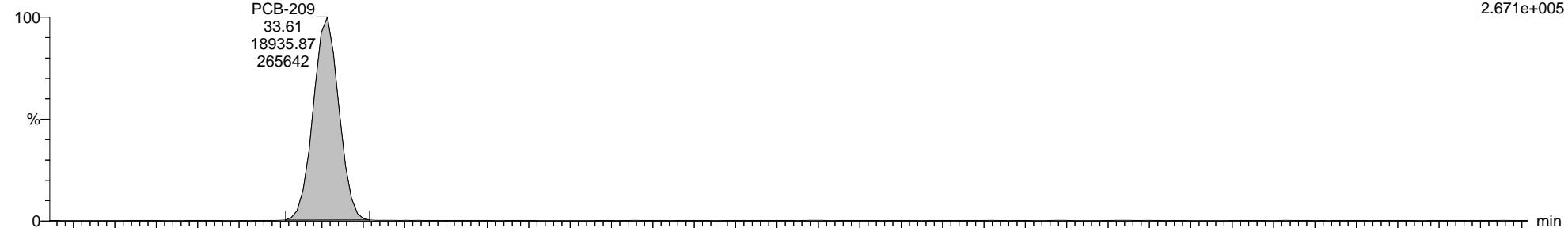
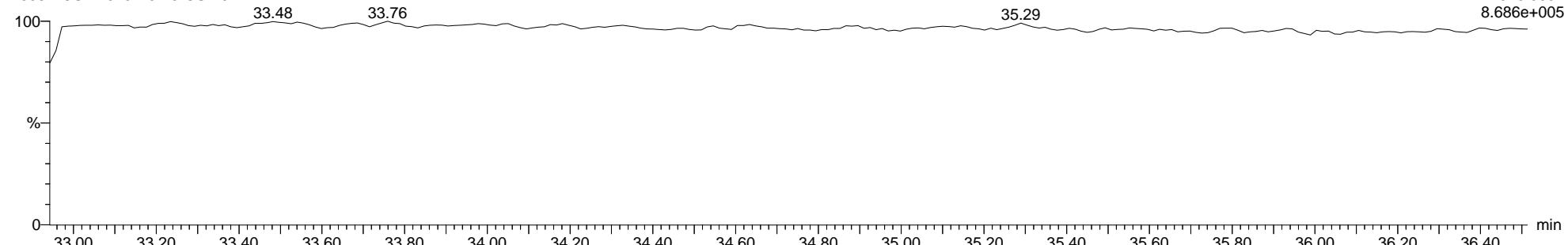
13C-PCB-208

29.72  
452363.16  
857213813C-PCB-206  
32.44  
325416.59  
50285945-150917B06 Smooth(Mn,1x1)  
1668A-CS#2-015 H5-15-CS2-01113C-PCB-208  
29.72  
579425.38  
1088602213C-PCB-206  
32.44  
414284.34  
64417425-150917B06 Smooth(Mn,1x1)  
1668A-CS#2-015 H5-15-CS2-01129.34  
9151.77  
118273

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

**Name: 5-150917B06, Date: 17-Sep-2015, Time: 18:44:53, ID: H5-15-CS2-011, Description: 1668A-CS#2-015, Vial: Tray1:4****PCB-209**5-150917B06 Smooth(Mn,1x1)  
1668A-CS#2-015 H5-15-CS2-0115-150917B06 Smooth(Mn,1x1)  
1668A-CS#2-015 H5-15-CS2-0115-150917B06 Smooth(Mn,1x1)  
1668A-CS#2-015 H5-15-CS2-011

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

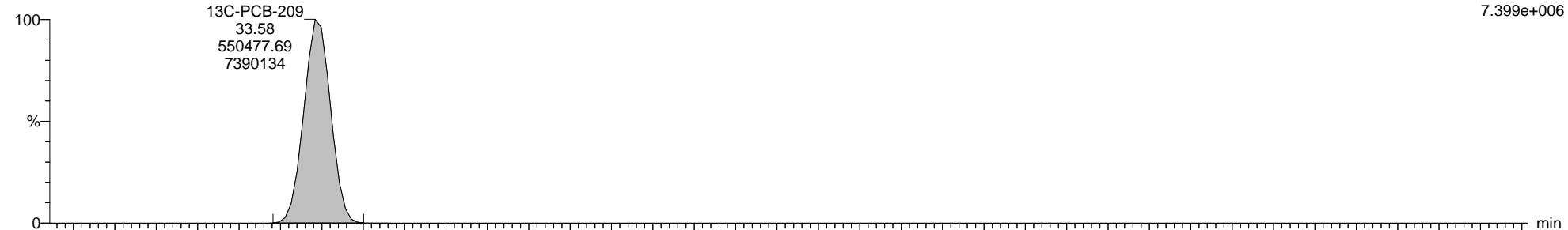
Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Name: 5-150917B06, Date: 17-Sep-2015, Time: 18:44:53, ID: H5-15-CS2-011, Description: 1668A-CS#2-015, Vial: Tray1:4

### 13C-PCB-209

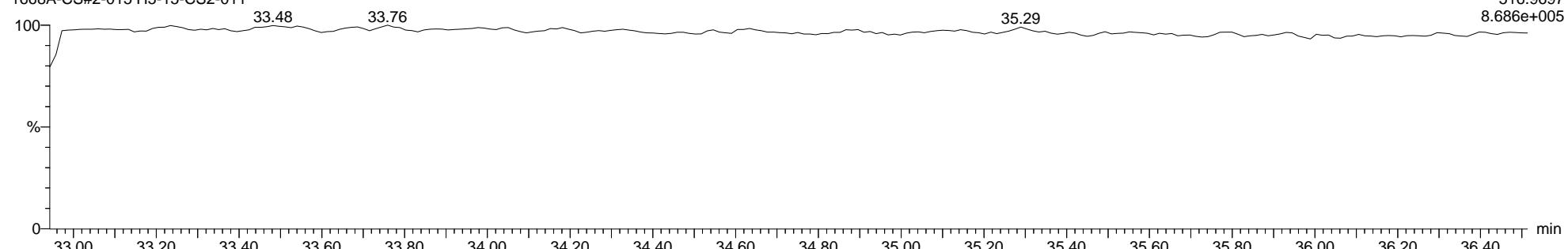
5-150917B06 Smooth(Mn,1x1)  
1668A-CS#2-015 H5-15-CS2-011



5-150917B06 Smooth(Mn,1x1)  
1668A-CS#2-015 H5-15-CS2-011



5-150917B06 Smooth(Mn,1x1)  
1668A-CS#2-015 H5-15-CS2-011



Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

**Name: 5-150917B05, Date: 17-Sep-2015, Time: 18:07:06, ID: H5-15-CS3-011, Description: 1668A-CS#3-015, Vial: Tray1:3****PCB-1**

5-150917B05 Smooth(Mn,1x1)

1668A-CS#3-015 H5-15-CS3-011

PCB-1

8.85

1469229.38

36586892

PCB-3

10.39

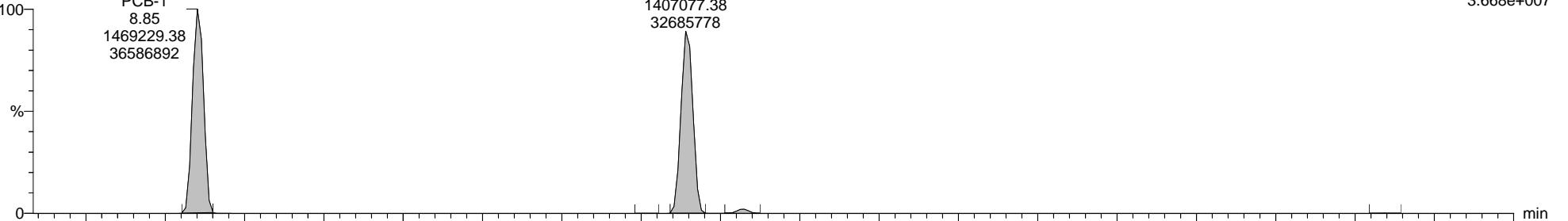
1407077.38

32685778

F1:Voltage SIR,EI+

188.0393

3.668e+007



5-150917B05 Smooth(Mn,1x1)

1668A-CS#3-015 H5-15-CS3-011

PCB-1

8.85

472526.19

11834172

PCB-3

10.39

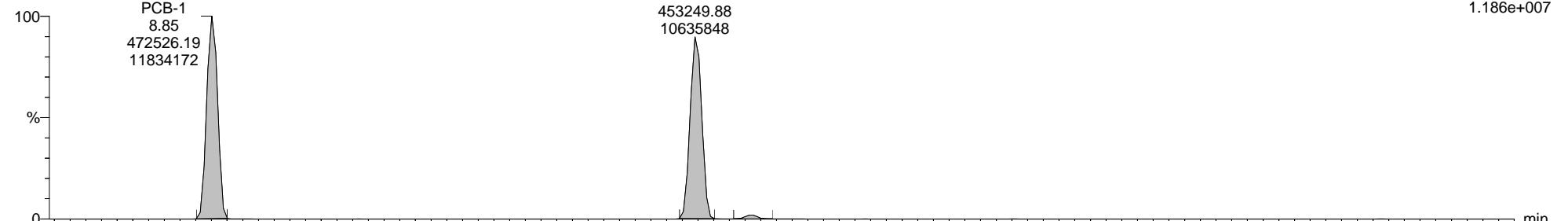
453249.88

10635848

F1:Voltage SIR,EI+

190.0363

1.186e+007



5-150917B05 Smooth(Mn,1x1)

1668A-CS#3-015 H5-15-CS3-011

PCB-1

8.81

9.31

44123.58

912984

10.56

10.97

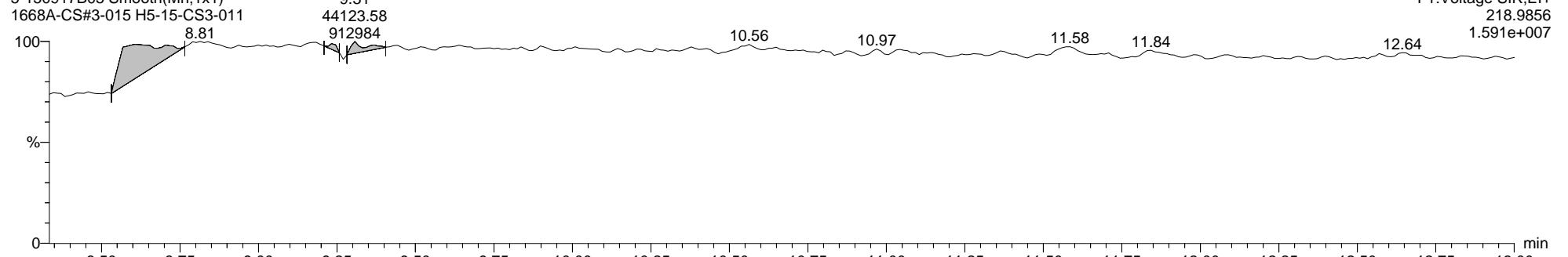
11.58

11.84

F1:Voltage SIR,EI+

218.9856

1.591e+007



Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Name: 5-150917B05, Date: 17-Sep-2015, Time: 18:07:06, ID: H5-15-CS3-011, Description: 1668A-CS#3-015, Vial: Tray1:3

**13C-PCB-1**

5-150917B05 Smooth(Mn,1x1)

1668A-CS#3-015 H5-15-CS3-011

13C-PCB-1

8.84  
3147646.75  
75446136

13C-PCB-3

10.39

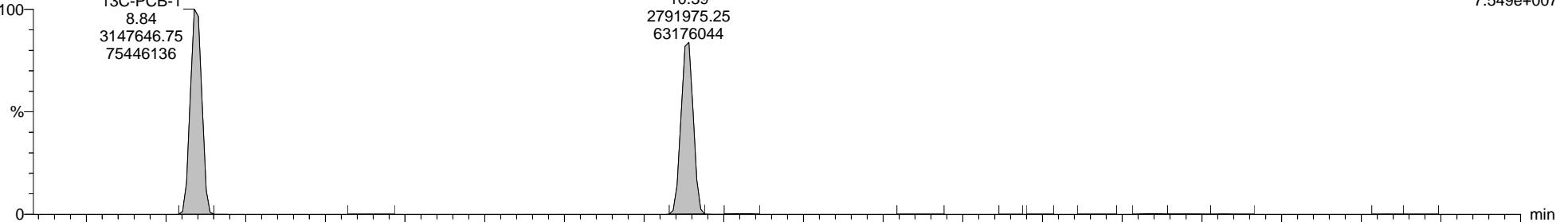
2791975.25

63176044

F1:Voltage SIR,EI+

200.0795

7.549e+007



5-150917B05 Smooth(Mn,1x1)

1668A-CS#3-015 H5-15-CS3-011

13C-PCB-1

8.84  
1004653.75  
24215788

13C-PCB-3

10.39

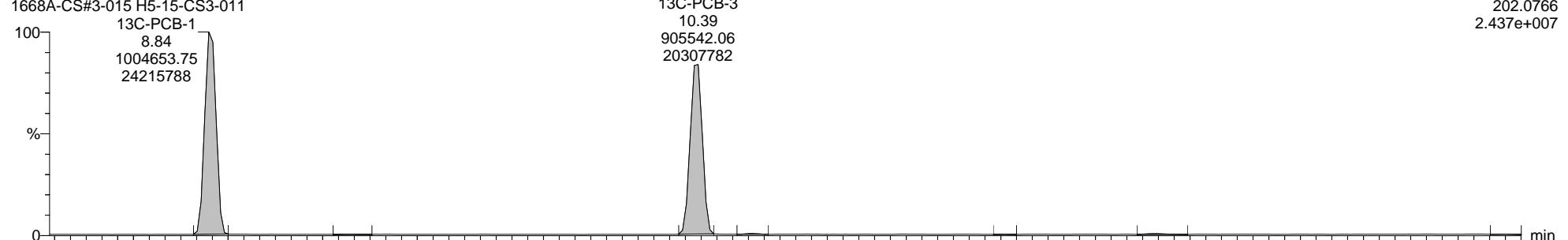
905542.06

20307782

F1:Voltage SIR,EI+

202.0766

2.437e+007



5-150917B05 Smooth(Mn,1x1)

1668A-CS#3-015 H5-15-CS3-011

13C-PCB-1

8.81  
44123.58  
912984

9.31

10.56

10.97

11.58

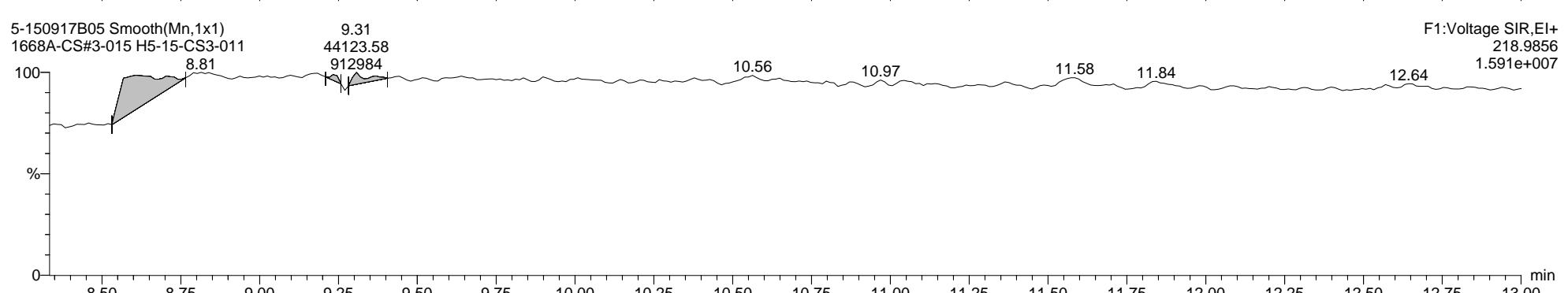
11.84

12.64

F1:Voltage SIR,EI+

218.9856

1.591e+007

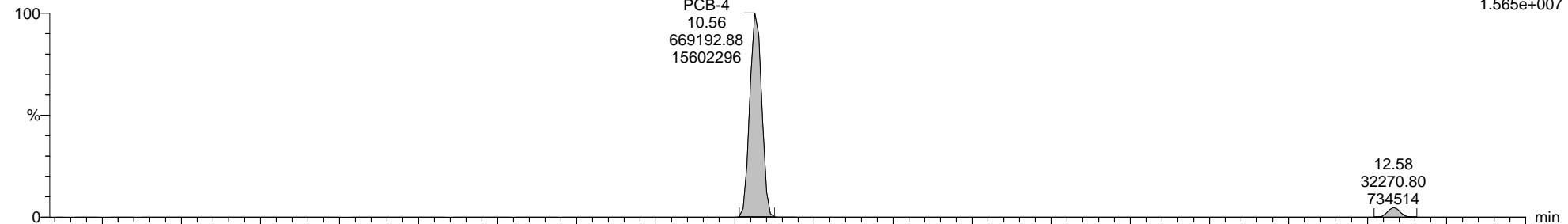
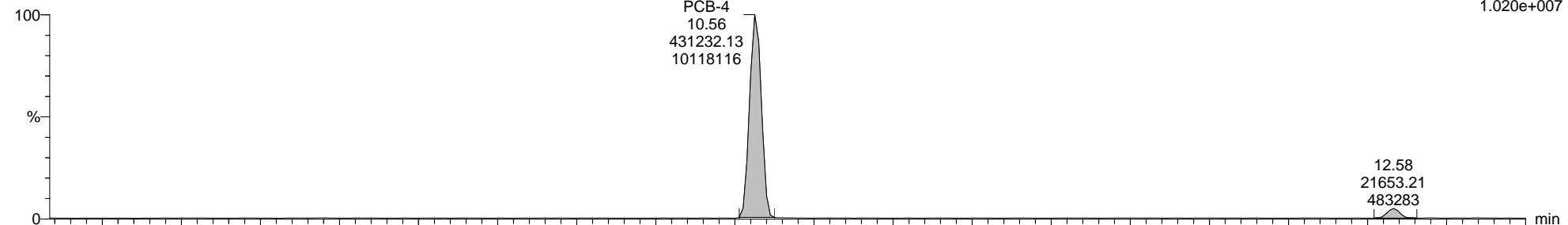
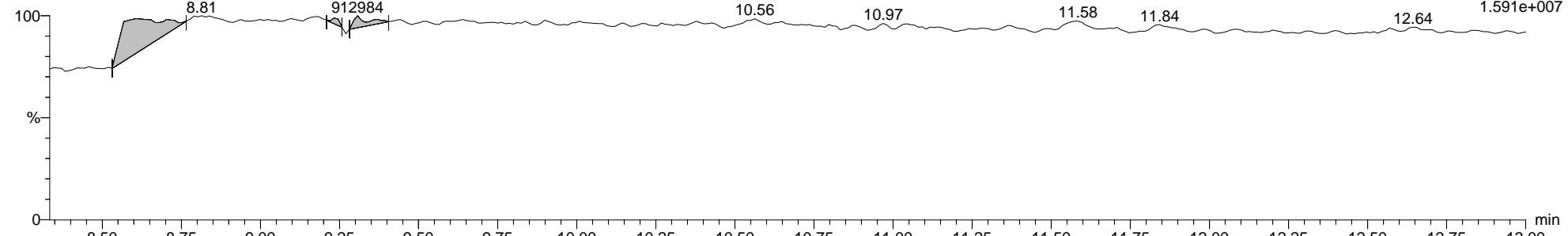


Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

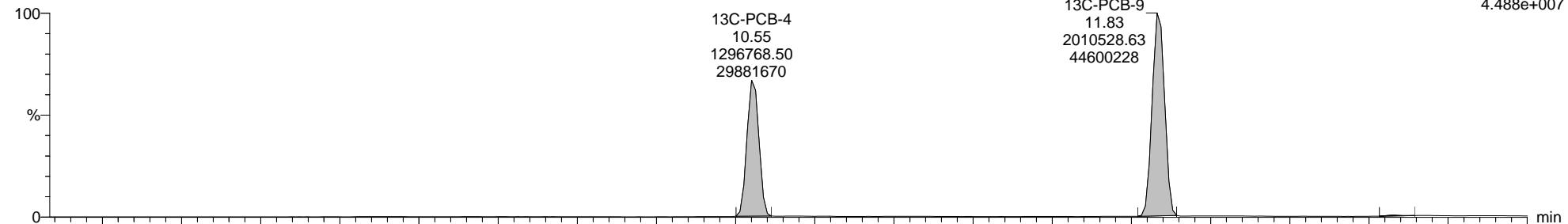
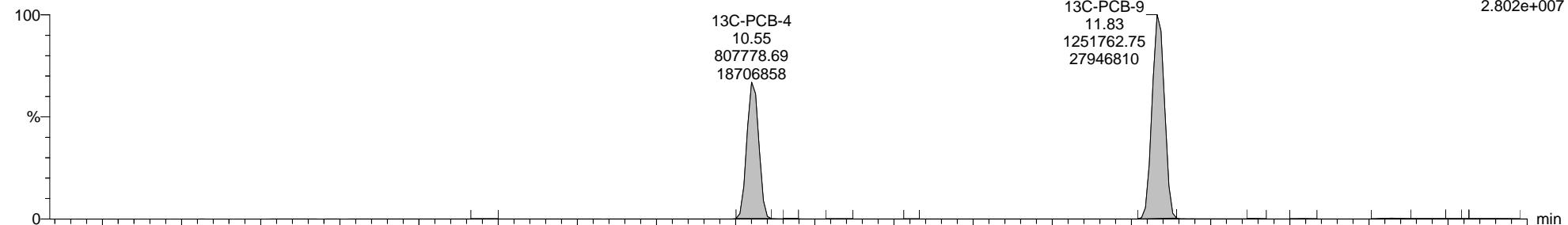
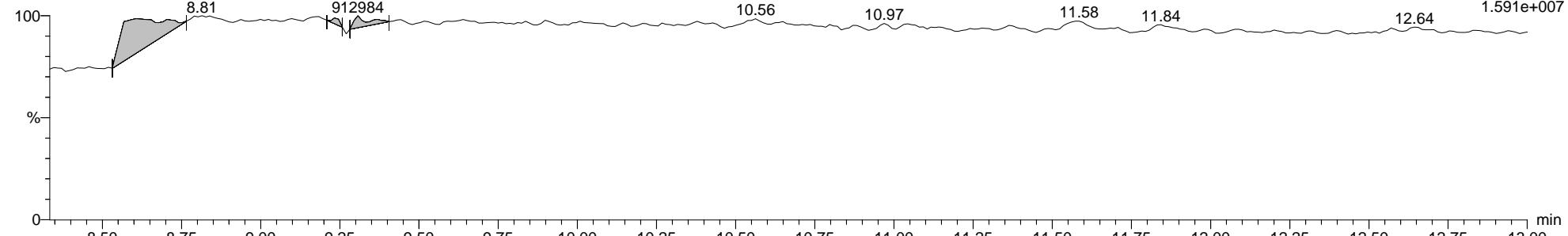
Name: 5-150917B05, Date: 17-Sep-2015, Time: 18:07:06, ID: H5-15-CS3-011, Description: 1668A-CS#3-015, Vial: Tray1:3

**PCB-4**5-150917B05 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CS3-0115-150917B05 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CS3-0115-150917B05 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CS3-011

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

**Name: 5-150917B05, Date: 17-Sep-2015, Time: 18:07:06, ID: H5-15-CS3-011, Description: 1668A-CS#3-015, Vial: Tray1:3****13C-PCB-4**5-150917B05 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CS3-0115-150917B05 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CS3-0115-150917B05 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CS3-011

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

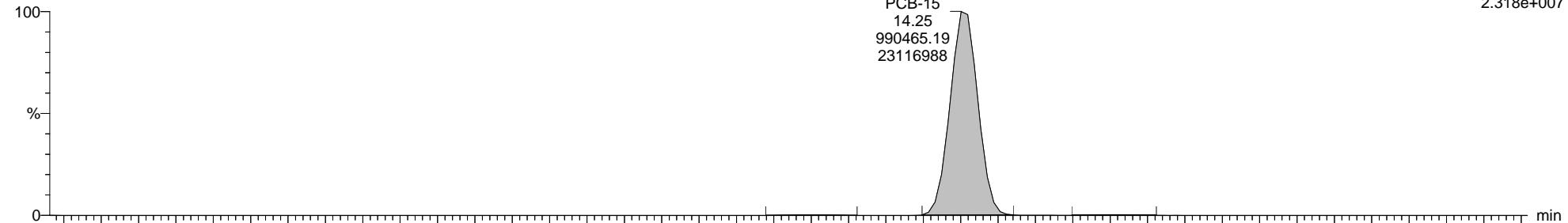
Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

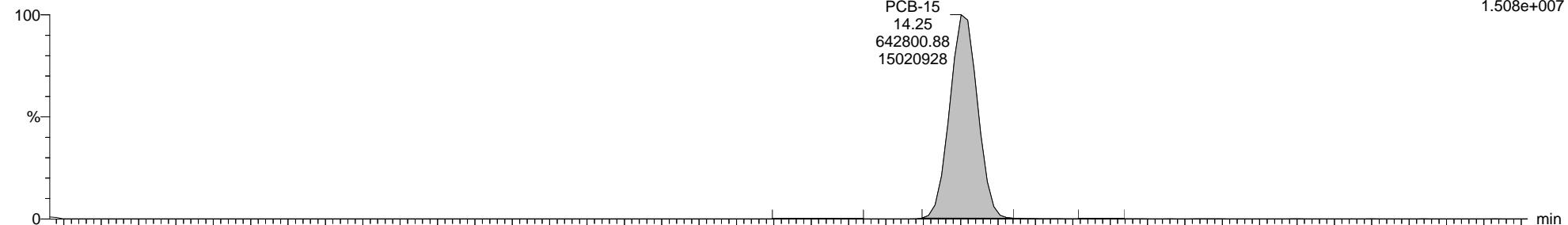
Name: 5-150917B05, Date: 17-Sep-2015, Time: 18:07:06, ID: H5-15-CS3-011, Description: 1668A-CS#3-015, Vial: Tray1:3

### PCB-15

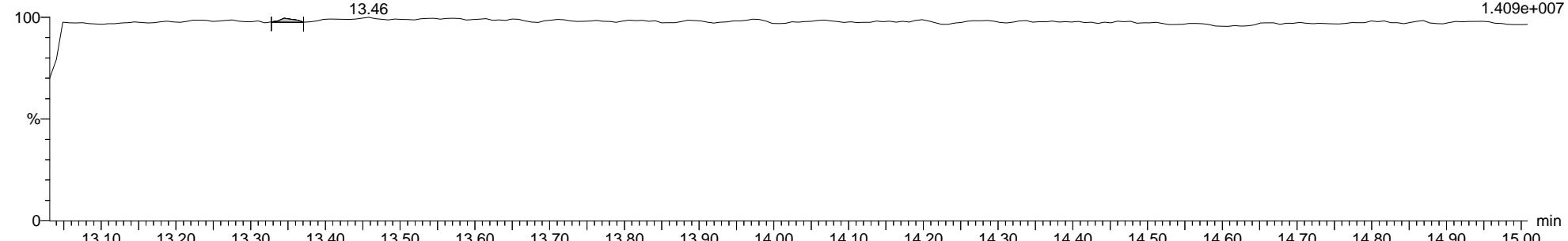
5-150917B05 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CS3-011



5-150917B05 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CS3-011



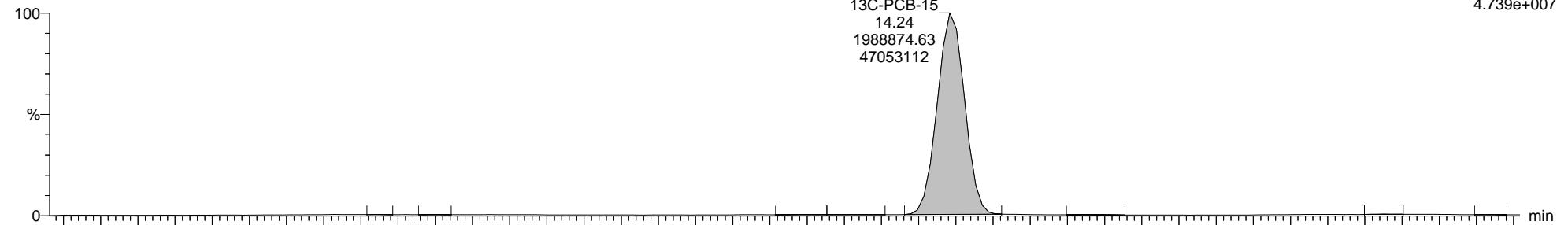
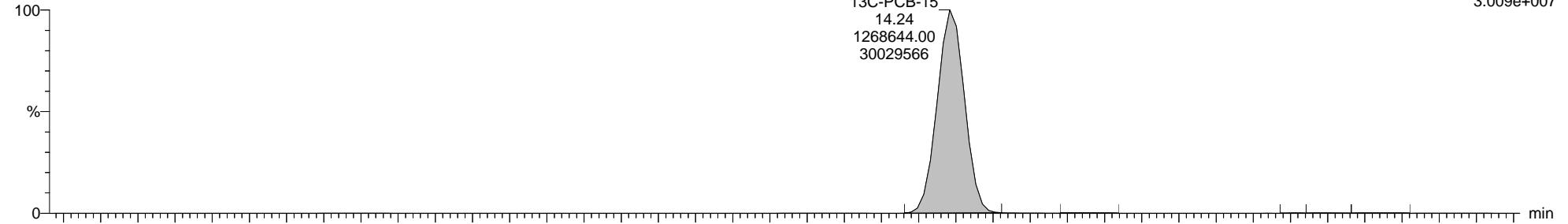
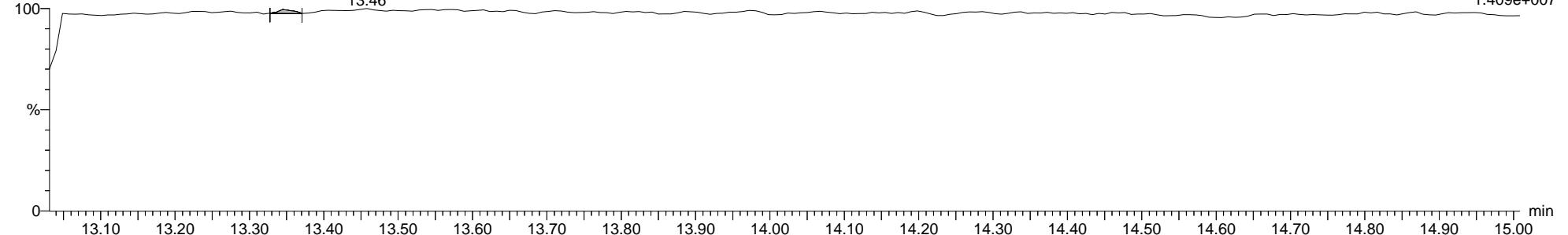
5-150917B05 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CS3-011



Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

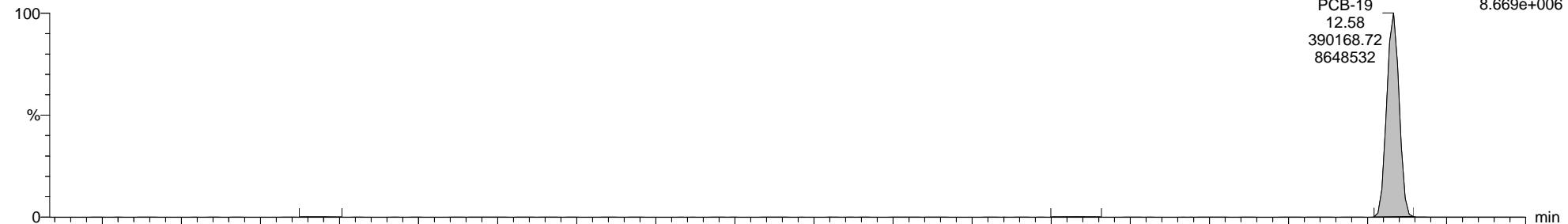
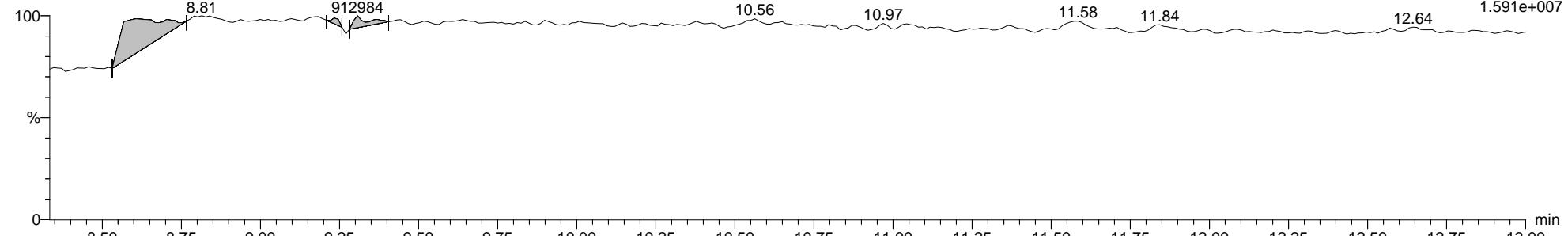
Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

**Name: 5-150917B05, Date: 17-Sep-2015, Time: 18:07:06, ID: H5-15-CS3-011, Description: 1668A-CS#3-015, Vial: Tray1:3****13C-PCB-15**5-150917B05 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CS3-011F2:Voltage SIR,EI+  
234.0406  
4.739e+0075-150917B05 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CS3-011F2:Voltage SIR,EI+  
236.0376  
3.009e+0075-150917B05 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CS3-011F2:Voltage SIR,EI+  
242.9856  
1.409e+007

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

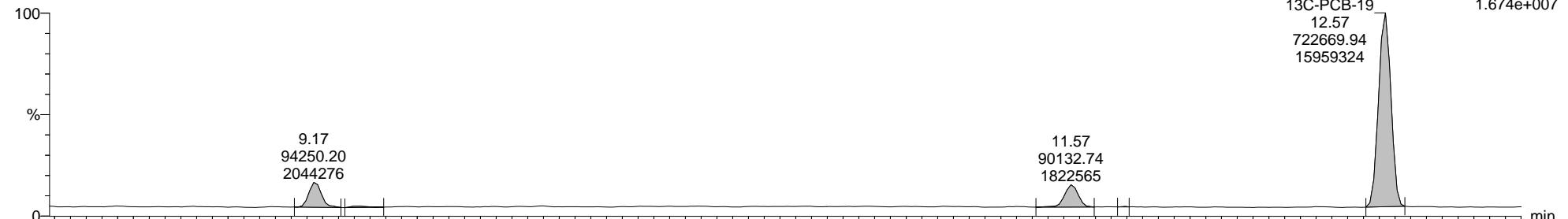
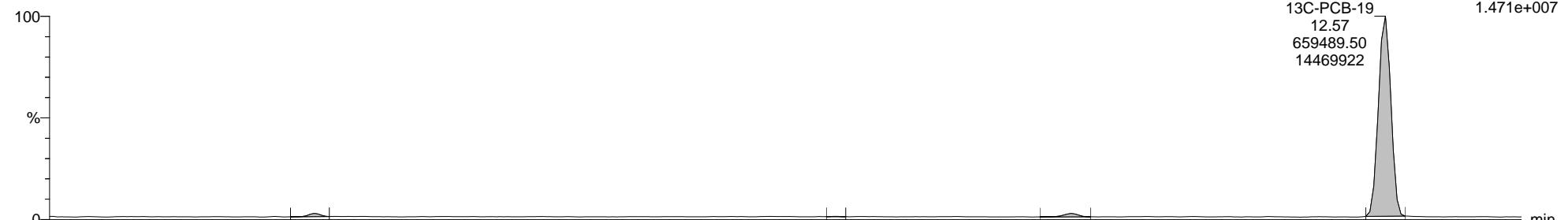
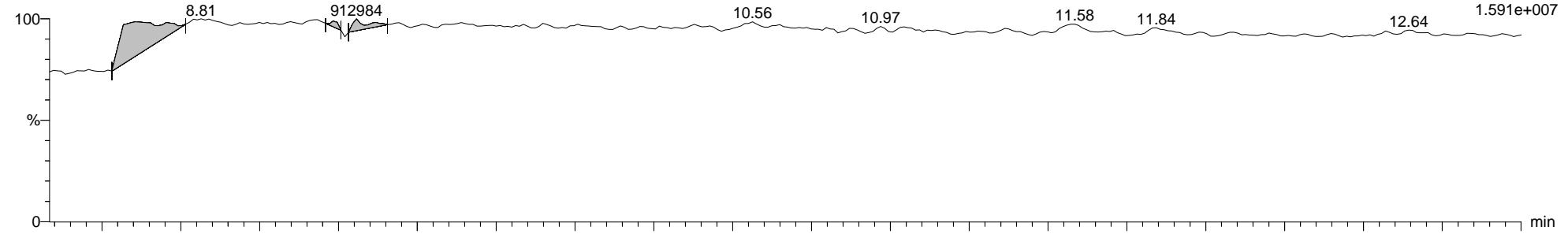
**Name: 5-150917B05, Date: 17-Sep-2015, Time: 18:07:06, ID: H5-15-CS3-011, Description: 1668A-CS#3-015, Vial: Tray1:3****PCB-19**5-150917B05 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CS3-0115-150917B05 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CS3-0115-150917B05 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CS3-011

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Name: 5-150917B05, Date: 17-Sep-2015, Time: 18:07:06, ID: H5-15-CS3-011, Description: 1668A-CS#3-015, Vial: Tray1:3

**13C-PCB-19**5-150917B05 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CS3-0115-150917B05 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CS3-0115-150917B05 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CS3-011

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Name: 5-150917B05, Date: 17-Sep-2015, Time: 18:07:06, ID: H5-15-CS3-011, Description: 1668A-CS#3-015, Vial: Tray1:3

**PCB-37**

5-150917B05 Smooth(Mn,1x1)

1668A-CS#3-015 H5-15-CS3-011

100 15.24 15.33

708085.50 729683.69

16249064 16507018

%

0

F3:Voltage SIR,EI+

255.9613

PCB-37 18.21 1.654e+007

744476.56 16348569

min

F3:Voltage SIR,EI+

257.9584

PCB-37 18.21 1.628e+007

727840.50 15966325

min

5-150917B05 Smooth(Mn,1x1)

1668A-CS#3-015 H5-15-CS3-011

100 15.24 15.33

688481.63 713042.50

15733901 16246488

%

0

5-150917B05 Smooth(Mn,1x1)

1668A-CS#3-015 H5-15-CS3-011

100 15.25;17939.18;547864

16.41

134082.86

1291323

16.74

17.15

17.53

F3:Voltage SIR,EI+

280.9825

PCB-37;18.18;138833.89;995637

3.039e+007

%

0

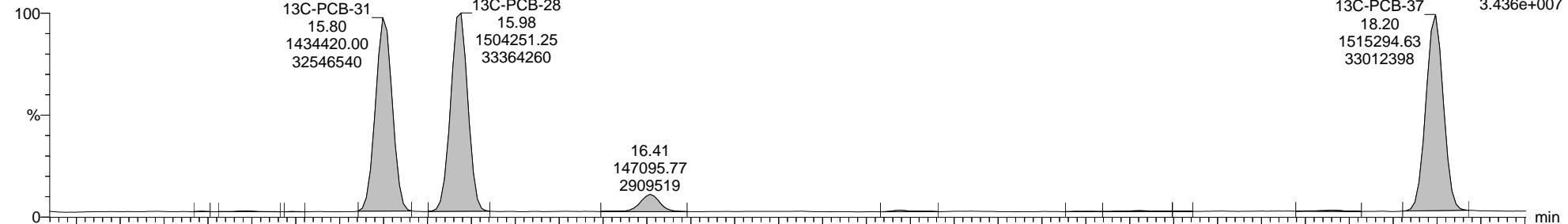
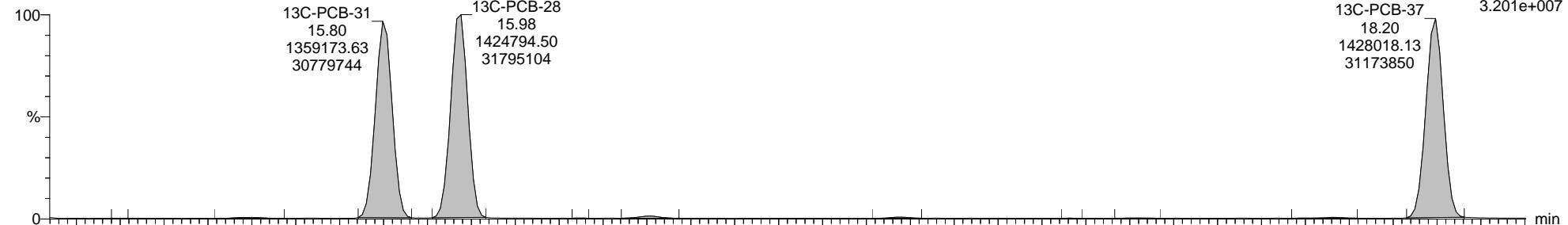
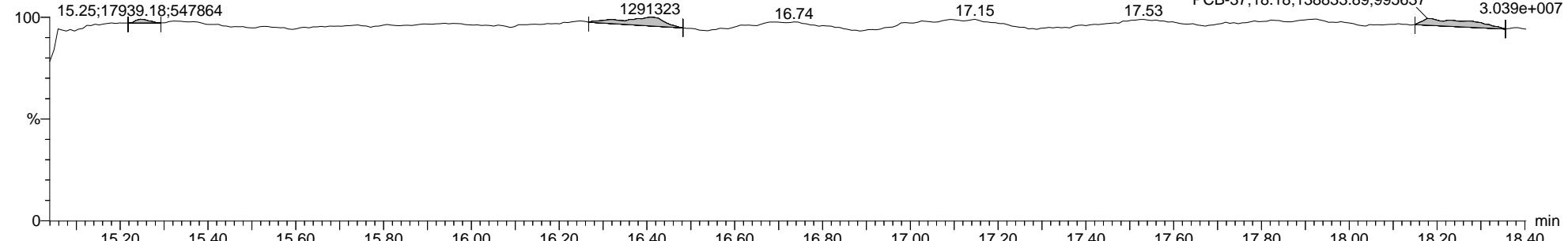
15.20 15.40 15.60 15.80 16.00 16.20 16.40 16.60 16.80 17.00 17.20 17.40 17.60 17.80 18.00 18.20 18.40 min

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

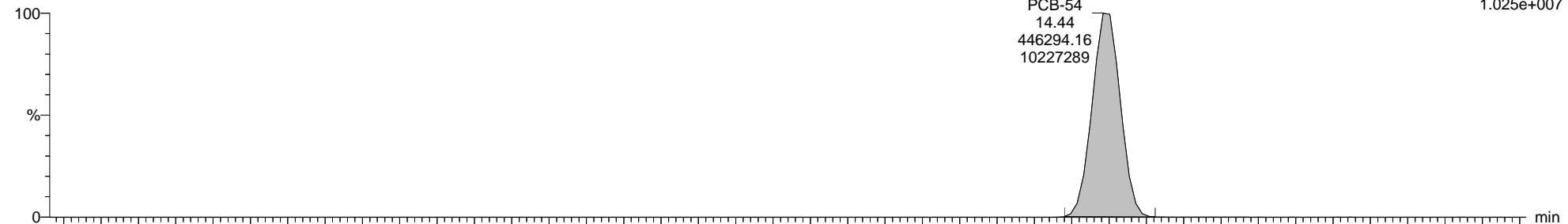
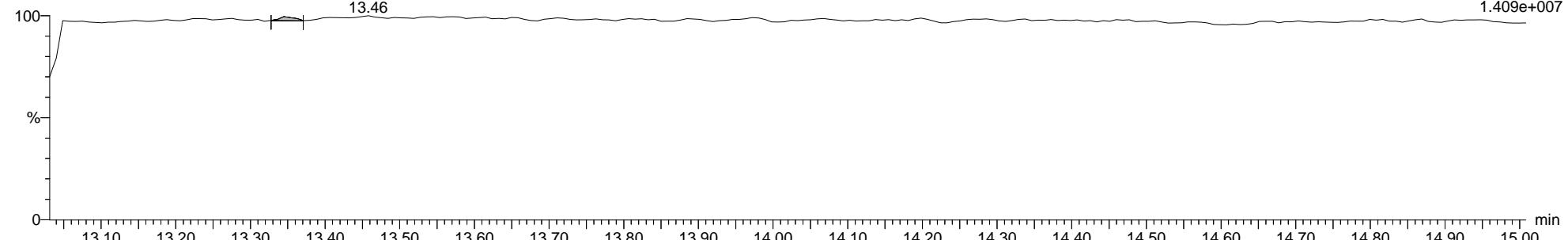
Name: 5-150917B05, Date: 17-Sep-2015, Time: 18:07:06, ID: H5-15-CS3-011, Description: 1668A-CS#3-015, Vial: Tray1:3

**13C-PCB-37**5-150917B05 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CS3-0115-150917B05 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CS3-0115-150917B05 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CS3-011

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

**Name: 5-150917B05, Date: 17-Sep-2015, Time: 18:07:06, ID: H5-15-CS3-011, Description: 1668A-CS#3-015, Vial: Tray1:3****PCB-54**5-150917B05 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CS3-0115-150917B05 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CS3-0115-150917B05 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CS3-011

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

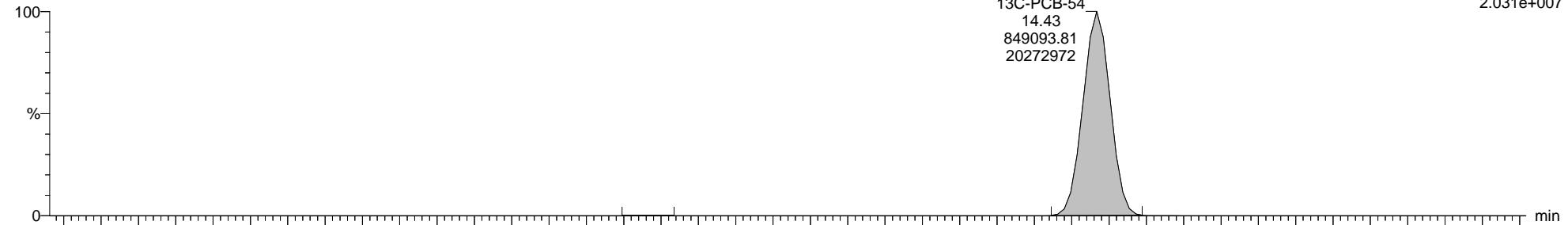
Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

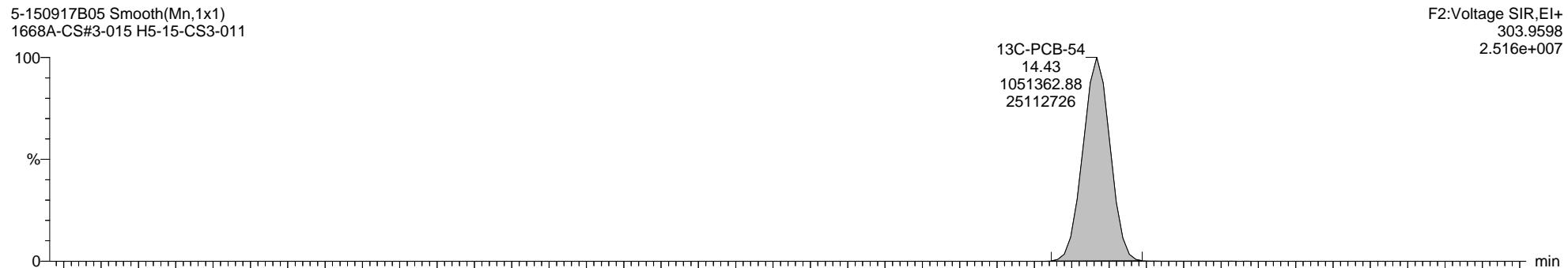
Name: 5-150917B05, Date: 17-Sep-2015, Time: 18:07:06, ID: H5-15-CS3-011, Description: 1668A-CS#3-015, Vial: Tray1:3

### 13C-PCB-54

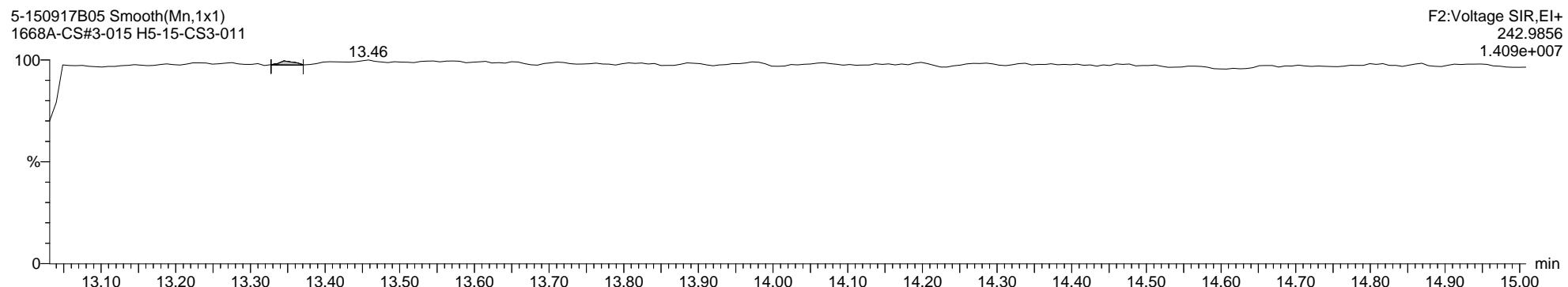
5-150917B05 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CS3-011



5-150917B05 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CS3-011



5-150917B05 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CS3-011

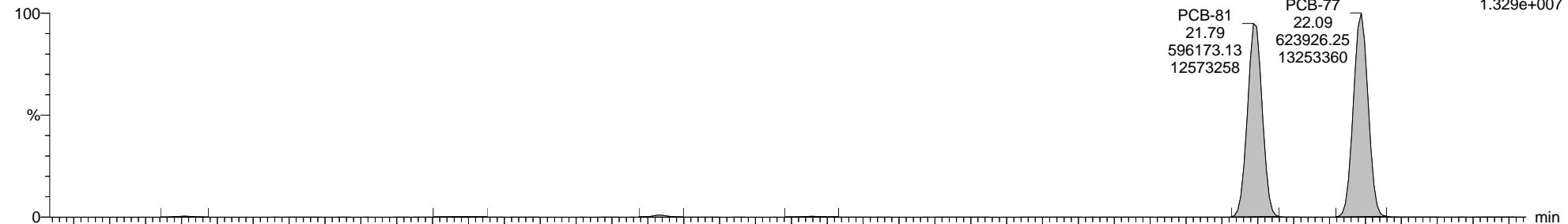
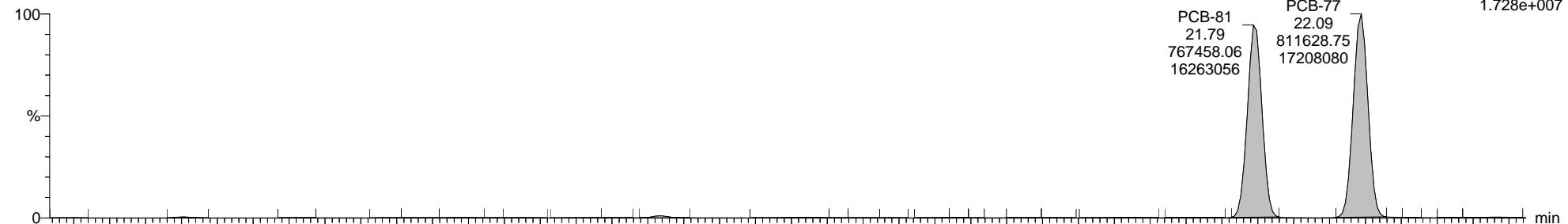
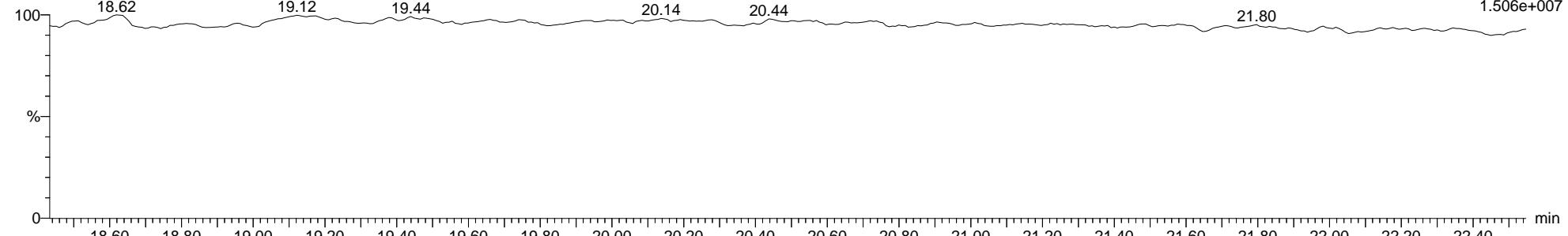


Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Name: 5-150917B05, Date: 17-Sep-2015, Time: 18:07:06, ID: H5-15-CS3-011, Description: 1668A-CS#3-015, Vial: Tray1:3

**PCB-81**5-150917B05 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CS3-0115-150917B05 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CS3-0115-150917B05 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CS3-011

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

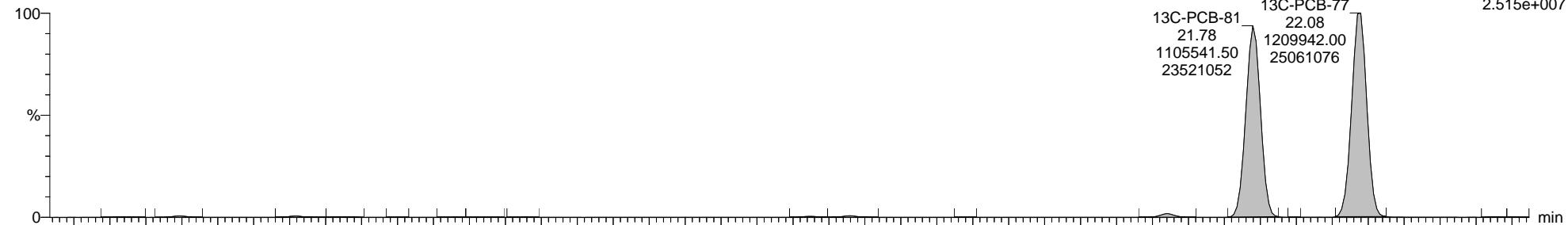
Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

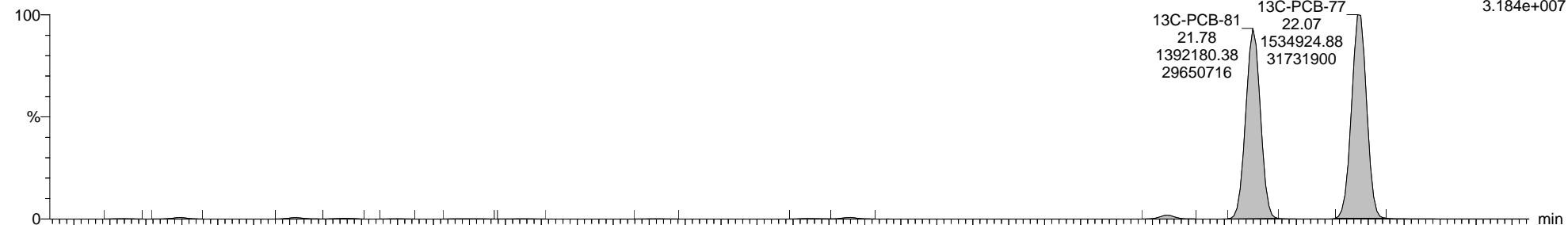
Name: 5-150917B05, Date: 17-Sep-2015, Time: 18:07:06, ID: H5-15-CS3-011, Description: 1668A-CS#3-015, Vial: Tray1:3

### 13C-PCB-81

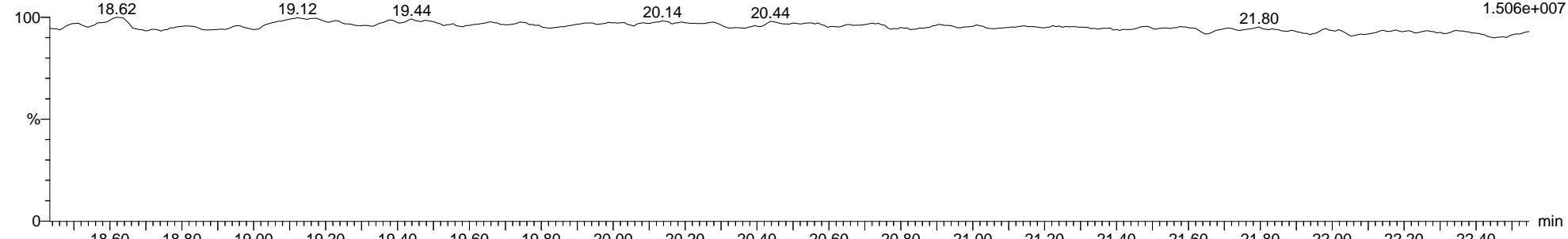
5-150917B05 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CS3-011



5-150917B05 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CS3-011



5-150917B05 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CS3-011

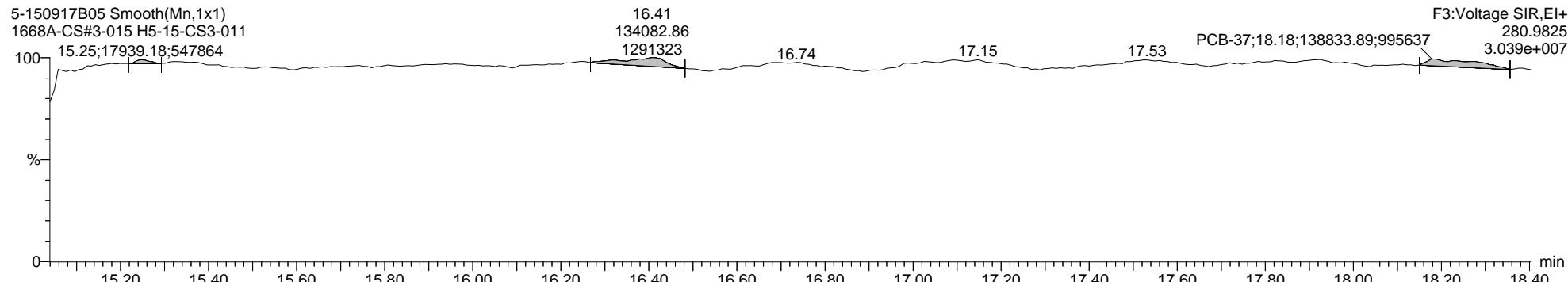
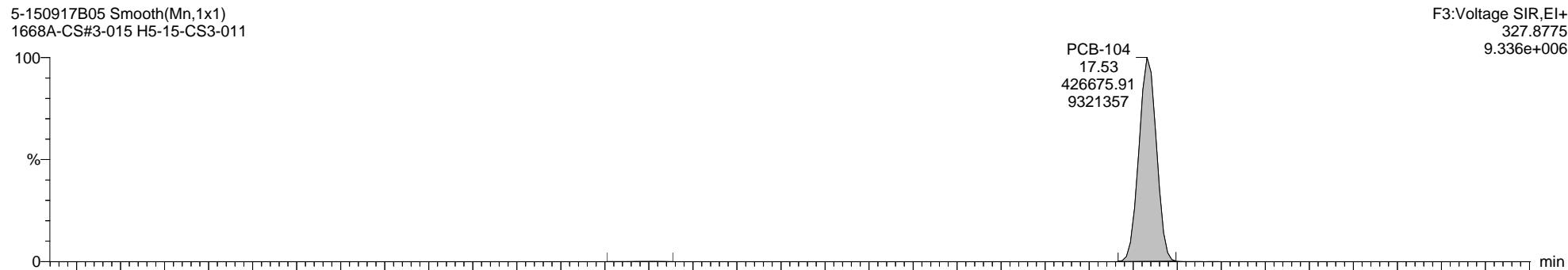
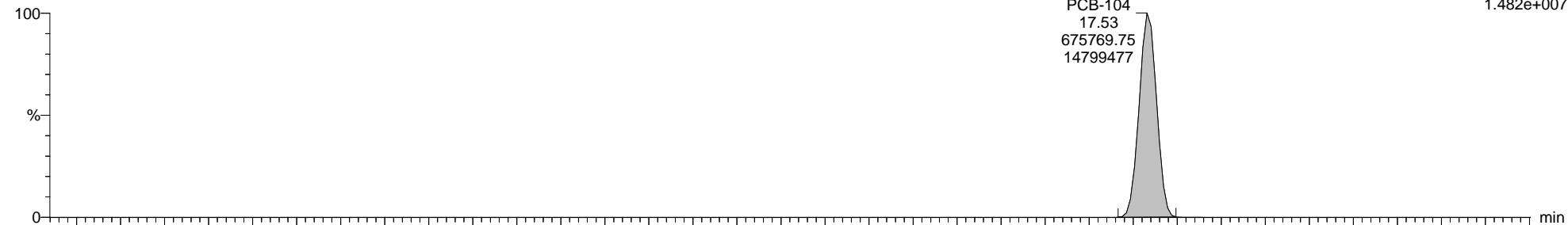


Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Name: 5-150917B05, Date: 17-Sep-2015, Time: 18:07:06, ID: H5-15-CS3-011, Description: 1668A-CS#3-015, Vial: Tray1:3

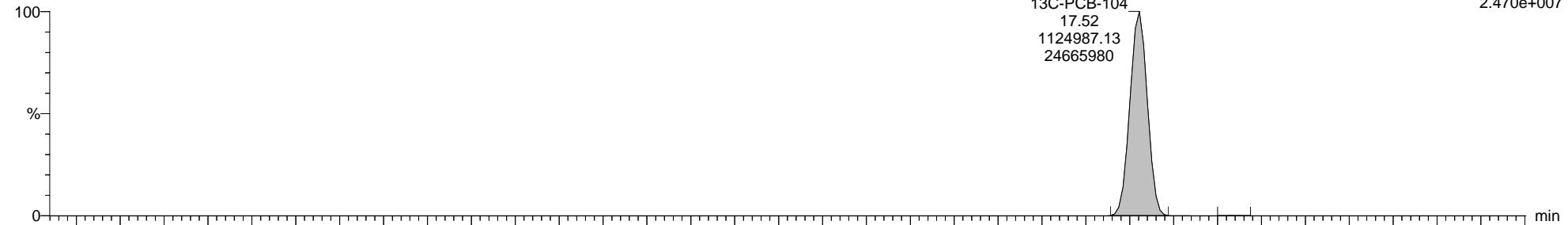
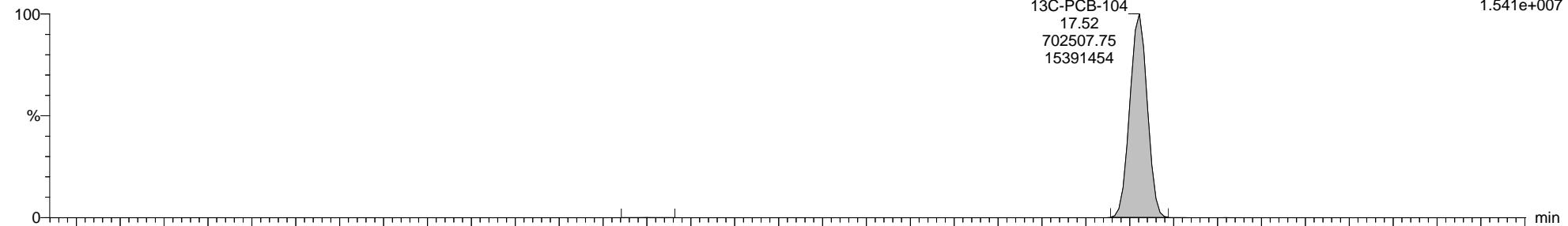
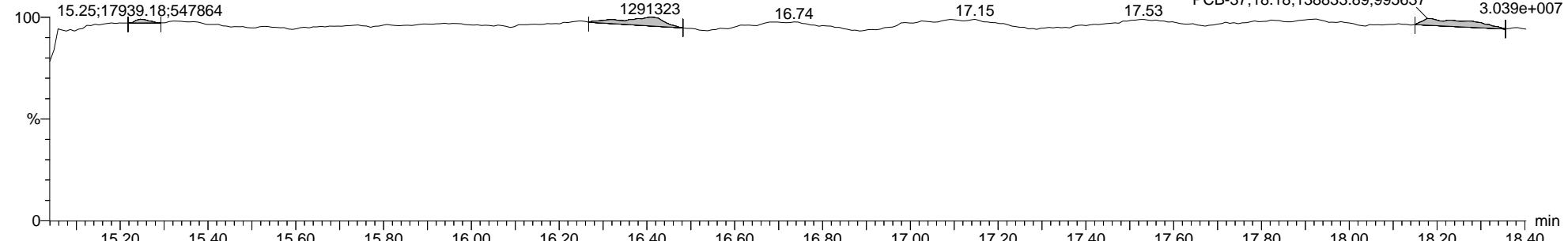
**PCB-104**5-150917B05 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CS3-011

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Name: 5-150917B05, Date: 17-Sep-2015, Time: 18:07:06, ID: H5-15-CS3-011, Description: 1668A-CS#3-015, Vial: Tray1:3

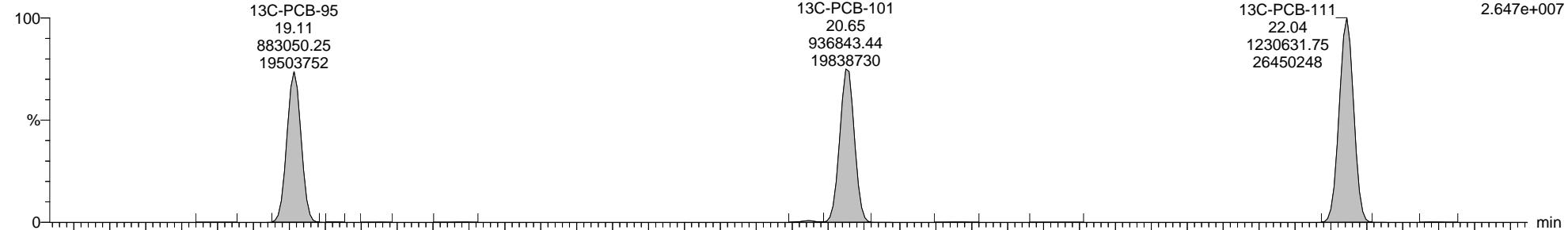
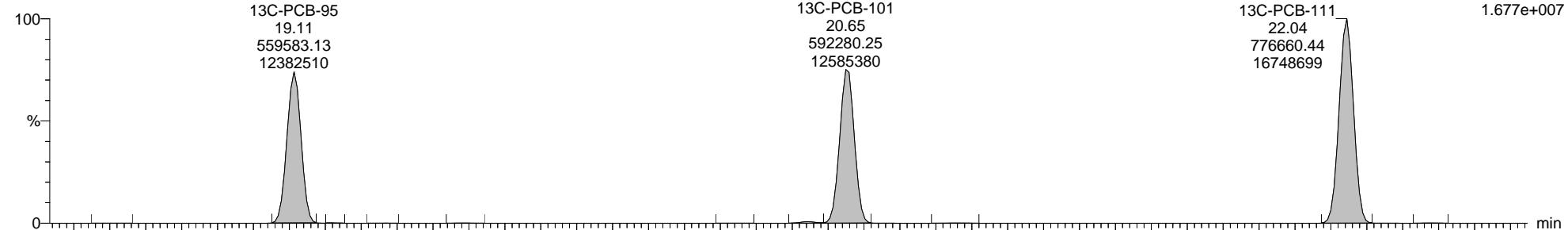
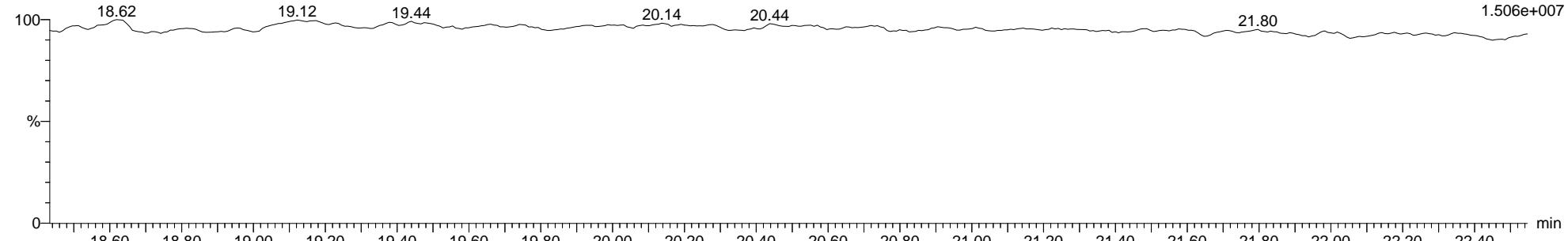
**13C-PCB-104**5-150917B05 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CS3-0115-150917B05 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CS3-0115-150917B05 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CS3-011

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Name: 5-150917B05, Date: 17-Sep-2015, Time: 18:07:06, ID: H5-15-CS3-011, Description: 1668A-CS#3-015, Vial: Tray1:3

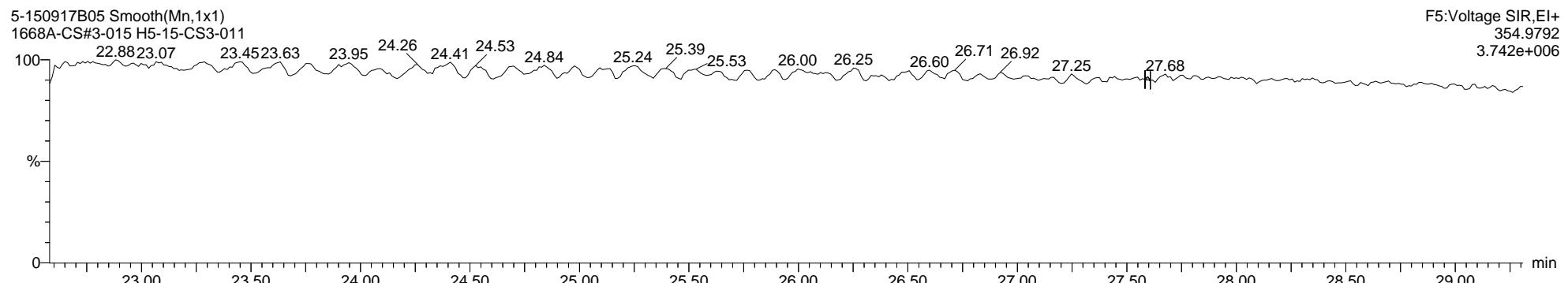
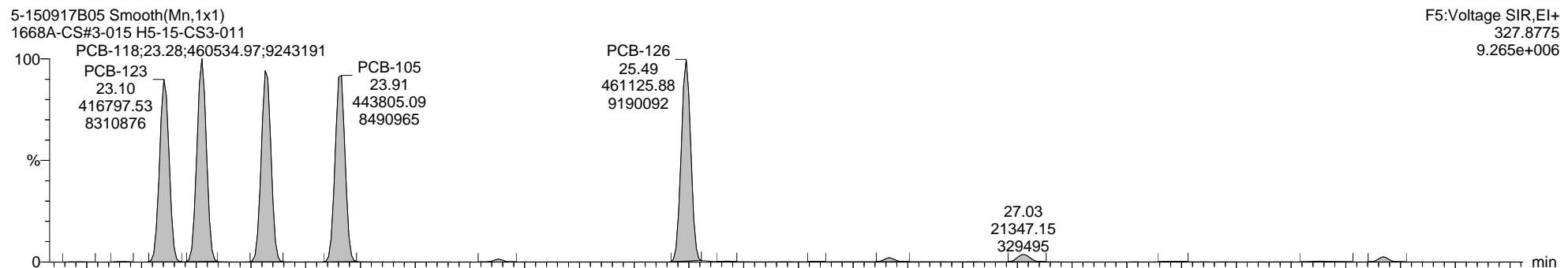
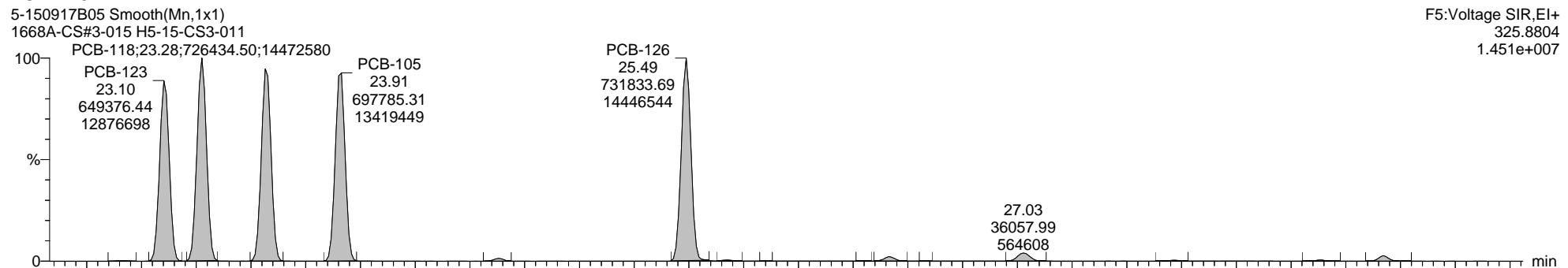
**13C-PCB-111**5-150917B05 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CS3-0115-150917B05 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CS3-0115-150917B05 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CS3-011

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Name: 5-150917B05, Date: 17-Sep-2015, Time: 18:07:06, ID: H5-15-CS3-011, Description: 1668A-CS#3-015, Vial: Tray1:3

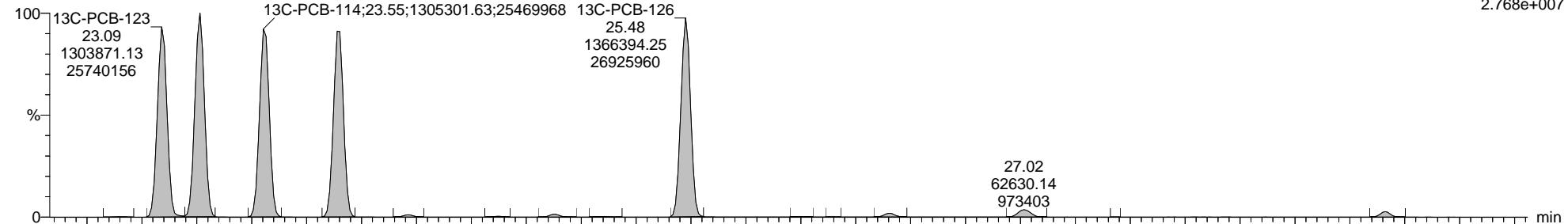
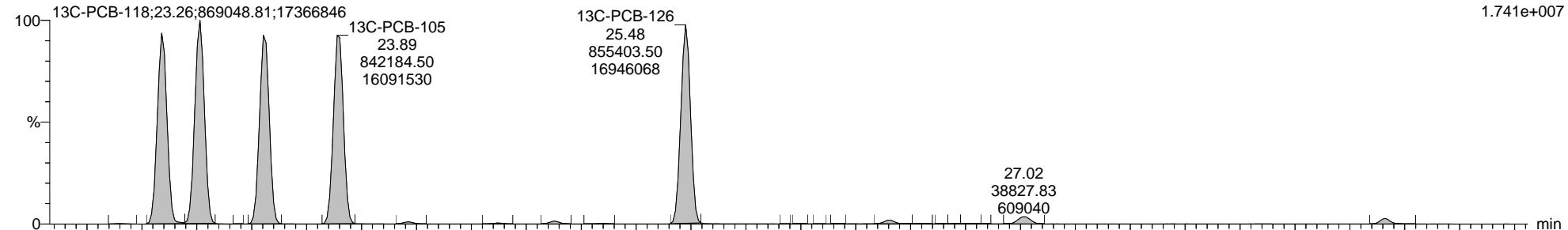
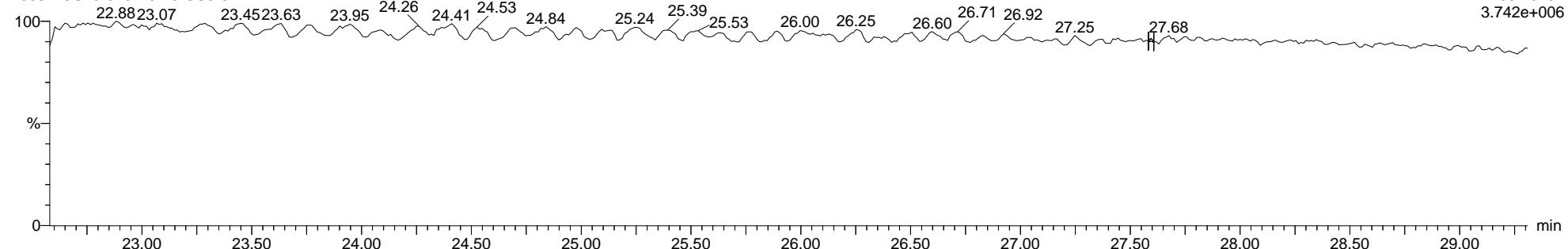
**PCB-123**

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

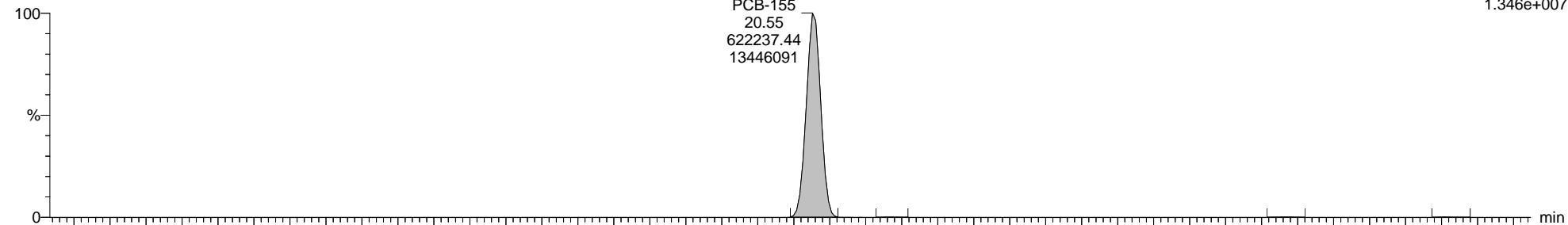
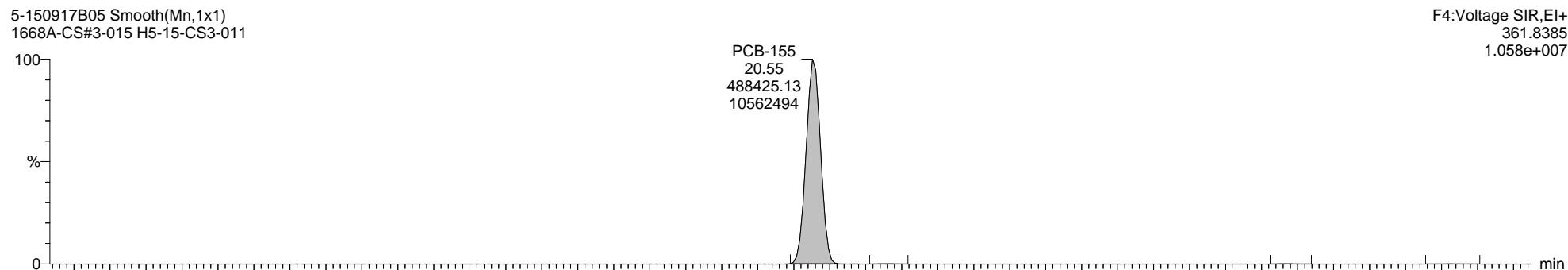
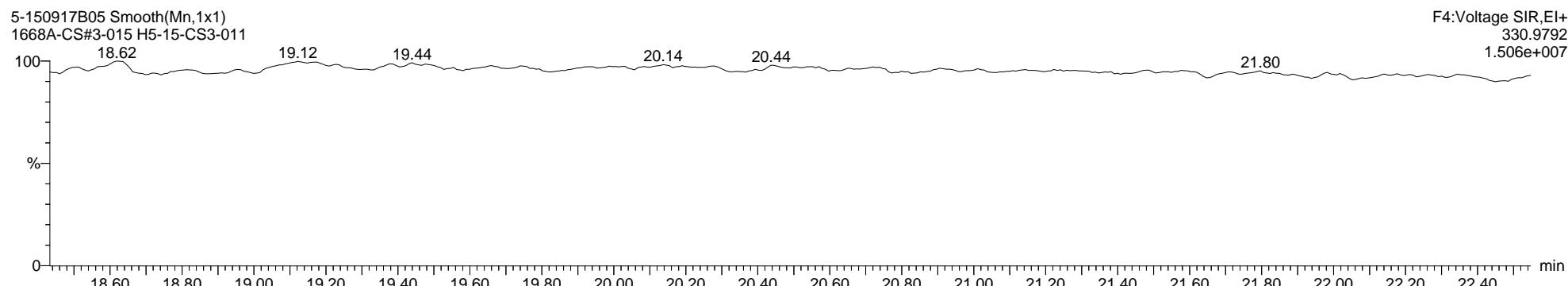
Name: 5-150917B05, Date: 17-Sep-2015, Time: 18:07:06, ID: H5-15-CS3-011, Description: 1668A-CS#3-015, Vial: Tray1:3

**13C-PCB-123**5-150917B05 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CS3-0115-150917B05 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CS3-0115-150917B05 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CS3-011

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

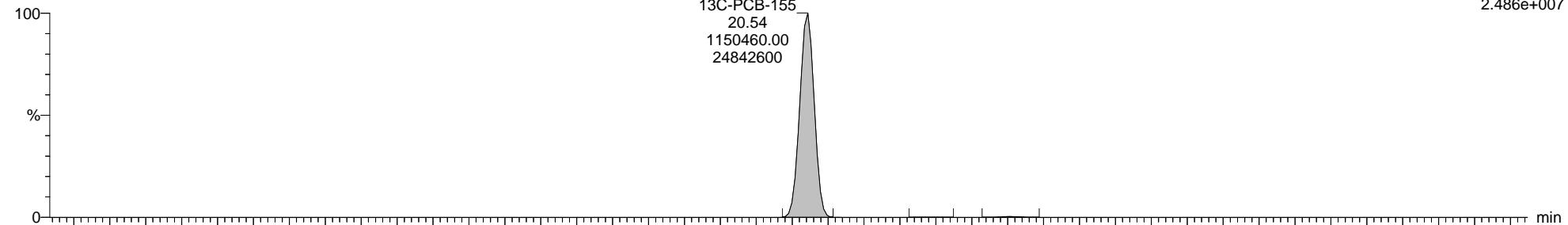
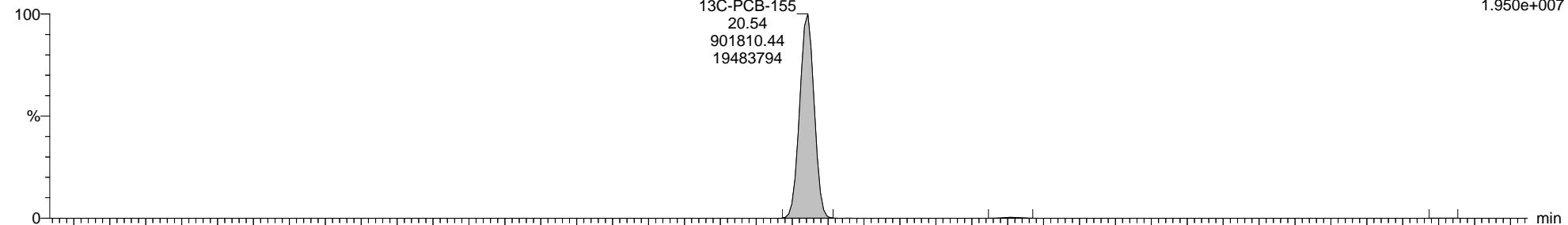
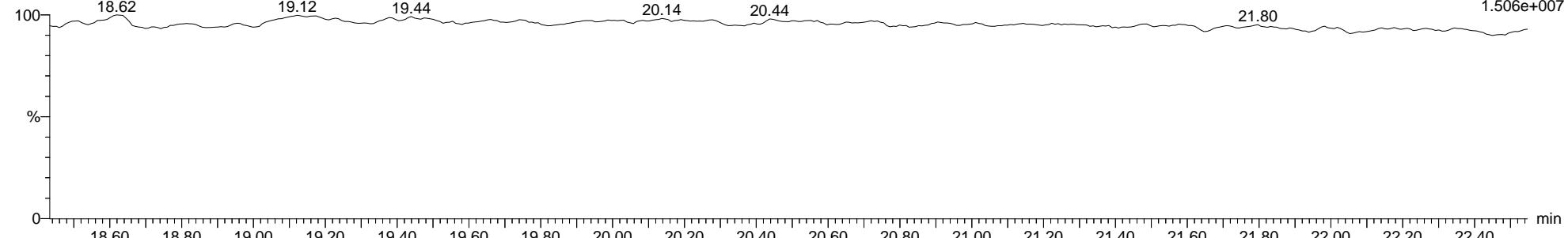
Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

**Name: 5-150917B05, Date: 17-Sep-2015, Time: 18:07:06, ID: H5-15-CS3-011, Description: 1668A-CS#3-015, Vial: Tray1:3****PCB-155**5-150917B05 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CS3-0115-150917B05 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CS3-0115-150917B05 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CS3-011

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

**Name: 5-150917B05, Date: 17-Sep-2015, Time: 18:07:06, ID: H5-15-CS3-011, Description: 1668A-CS#3-015, Vial: Tray1:3****13C-PCB-155**5-150917B05 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CS3-0115-150917B05 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CS3-011F4:Voltage SIR,EI+  
373.8789  
1.950e+0075-150917B05 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CS3-011F4:Voltage SIR,EI+  
330.9792  
1.506e+007

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Name: 5-150917B05, Date: 17-Sep-2015, Time: 18:07:06, ID: H5-15-CS3-011, Description: 1668A-CS#3-015, Vial: Tray1:3

**PCB-188**

5-150917B05 Smooth(Mn,1x1)

1668A-CS#3-015 H5-15-CS3-011

PCB-188

23.54  
517733.91  
10292088

F5:Voltage SIR,EI+

393.8025

1.031e+007

25.57

404456.03

7929197

27.71

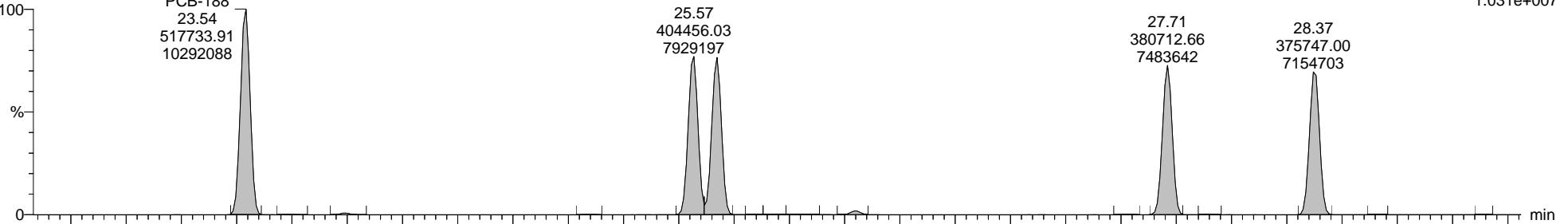
380712.66

7483642

28.37

375747.00

7154703



5-150917B05 Smooth(Mn,1x1)

1668A-CS#3-015 H5-15-CS3-011

PCB-188

23.54  
493888.75  
9811175

F5:Voltage SIR,EI+

395.7995

9.828e+006

25.67

381030.03

7559130

27.71

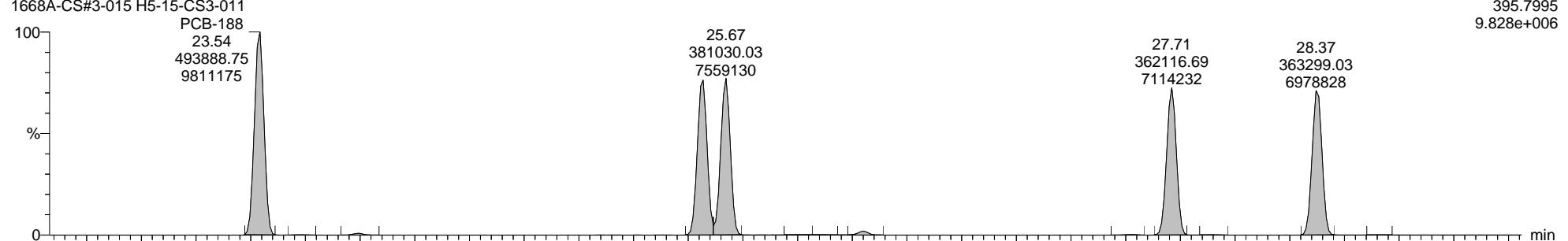
362116.69

7114232

28.37

363299.03

6978828



5-150917B05 Smooth(Mn,1x1)

1668A-CS#3-015 H5-15-CS3-011

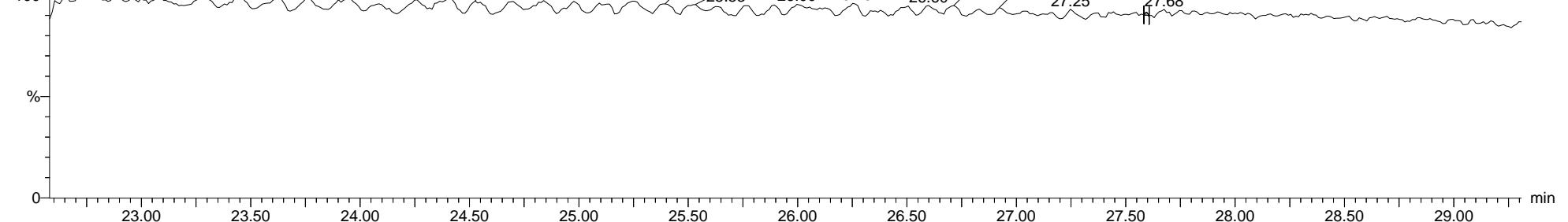
PCB-188

22.8823.07  
23.4523.63  
23.95 24.26  
24.41 24.53  
24.8425.24 25.39  
25.5326.00 26.25  
26.60 26.9226.71 27.25  
27.68

F5:Voltage SIR,EI+

354.9792

3.742e+006

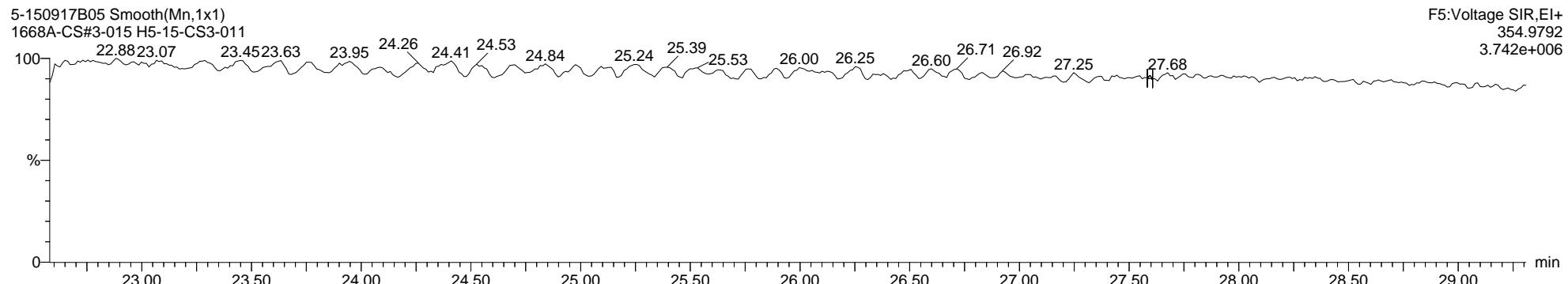
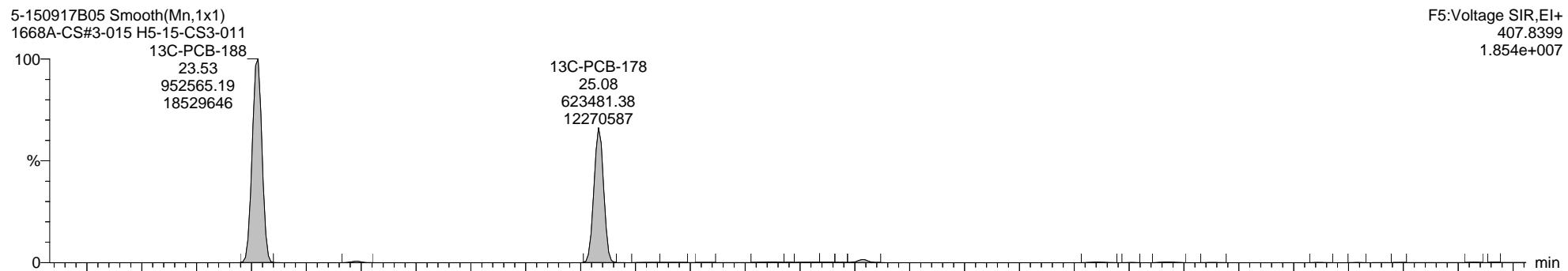
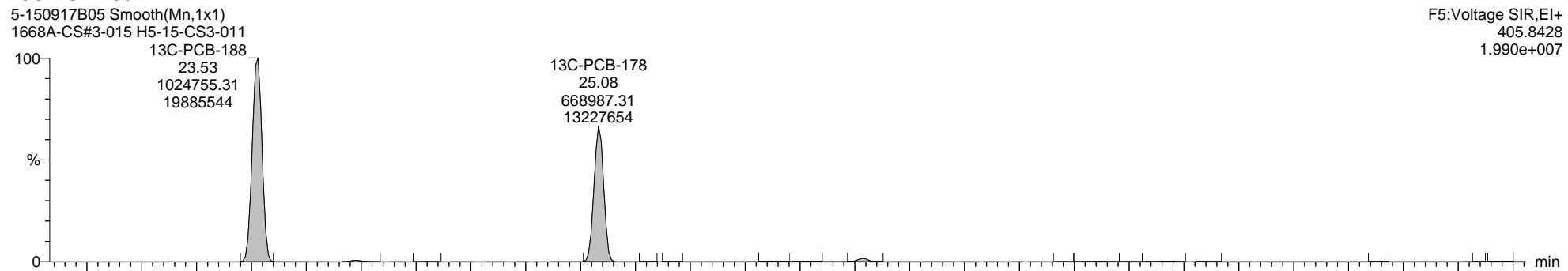


Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Name: 5-150917B05, Date: 17-Sep-2015, Time: 18:07:06, ID: H5-15-CS3-011, Description: 1668A-CS#3-015, Vial: Tray1:3

**13C-PCB-188**

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

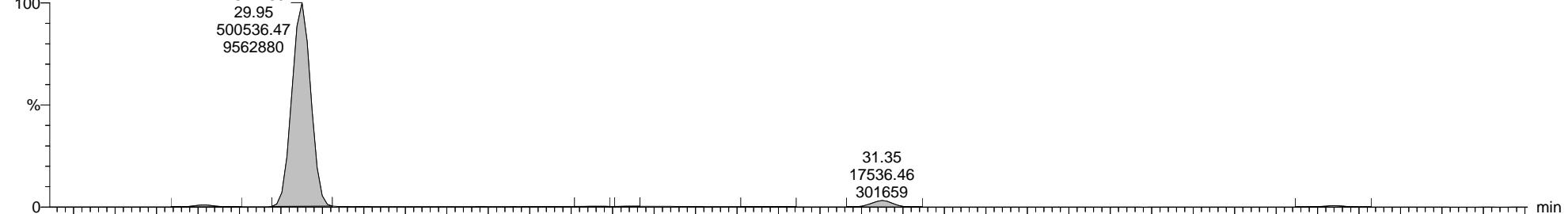
Name: 5-150917B05, Date: 17-Sep-2015, Time: 18:07:06, ID: H5-15-CS3-011, Description: 1668A-CS#3-015, Vial: Tray1:3

**PCB-189**

5-150917B05 Smooth(Mn,1x1)

1668A-CS#3-015 H5-15-CS3-011

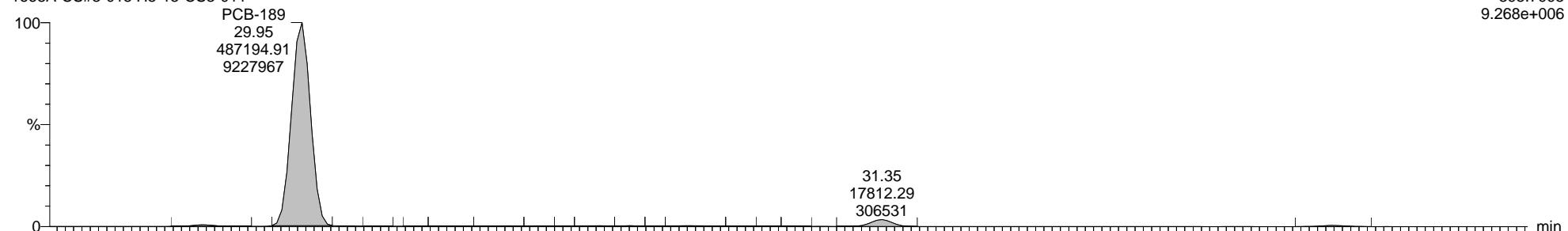
PCB-189



5-150917B05 Smooth(Mn,1x1)

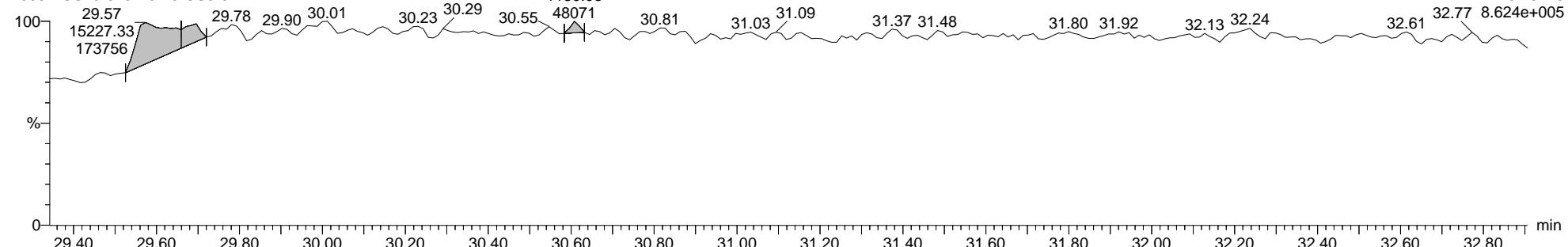
1668A-CS#3-015 H5-15-CS3-011

PCB-189



5-150917B05 Smooth(Mn,1x1)

1668A-CS#3-015 H5-15-CS3-011



Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

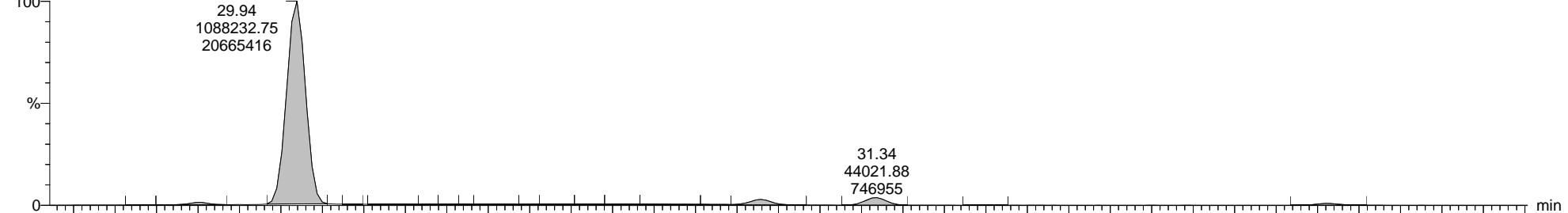
Name: 5-150917B05, Date: 17-Sep-2015, Time: 18:07:06, ID: H5-15-CS3-011, Description: 1668A-CS#3-015, Vial: Tray1:3

**13C-PCB-189**

5-150917B05 Smooth(Mn,1x1)

1668A-CS#3-015 H5-15-CS3-011

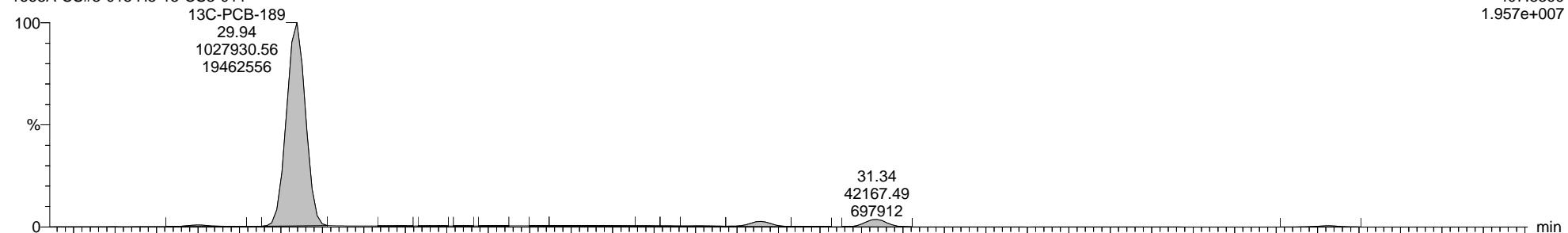
13C-PCB-189



5-150917B05 Smooth(Mn,1x1)

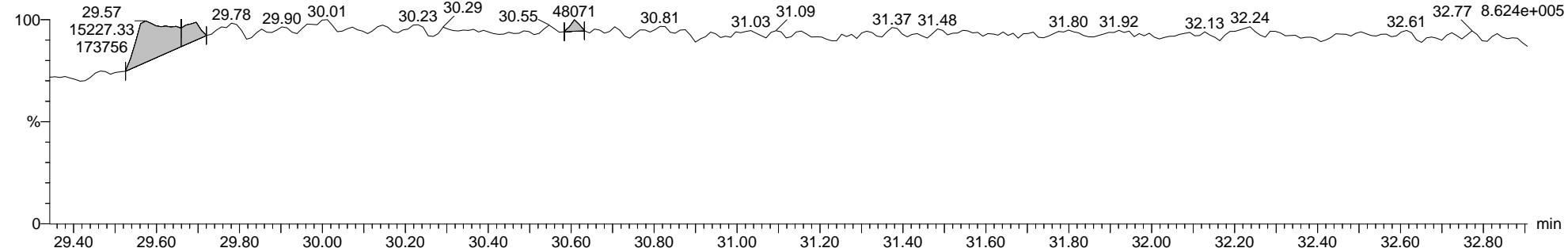
1668A-CS#3-015 H5-15-CS3-011

13C-PCB-189



5-150917B05 Smooth(Mn,1x1)

1668A-CS#3-015 H5-15-CS3-011

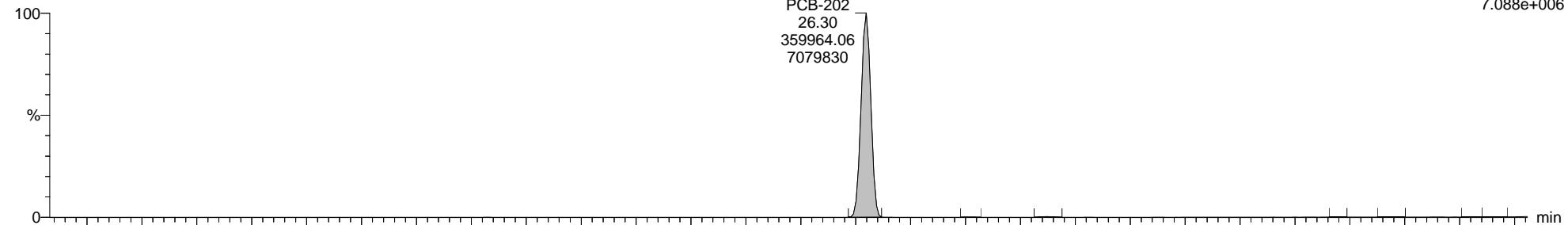
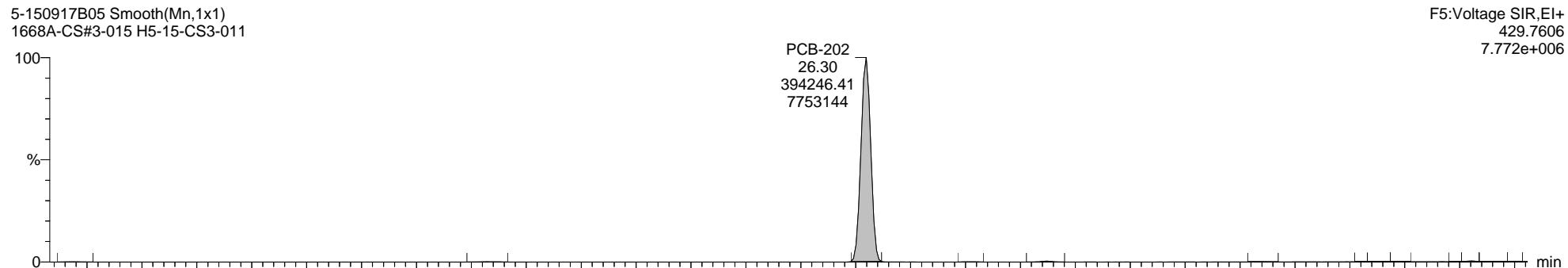
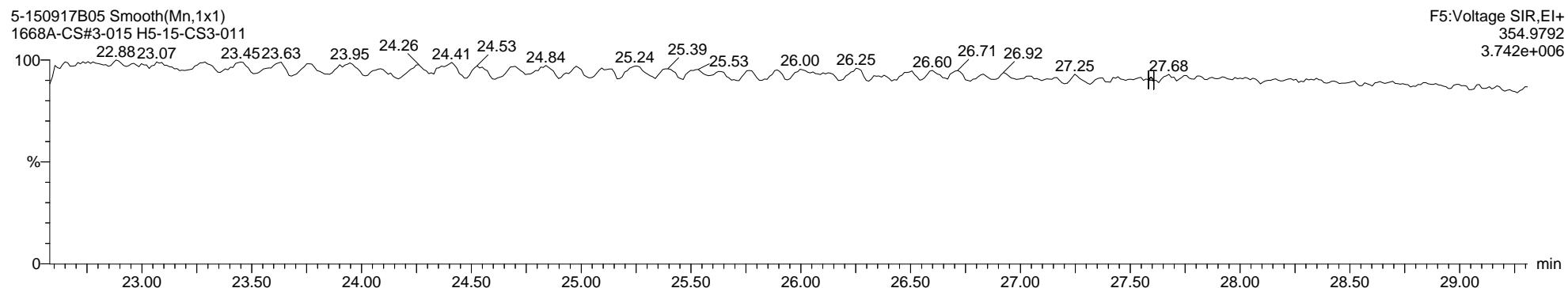


Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

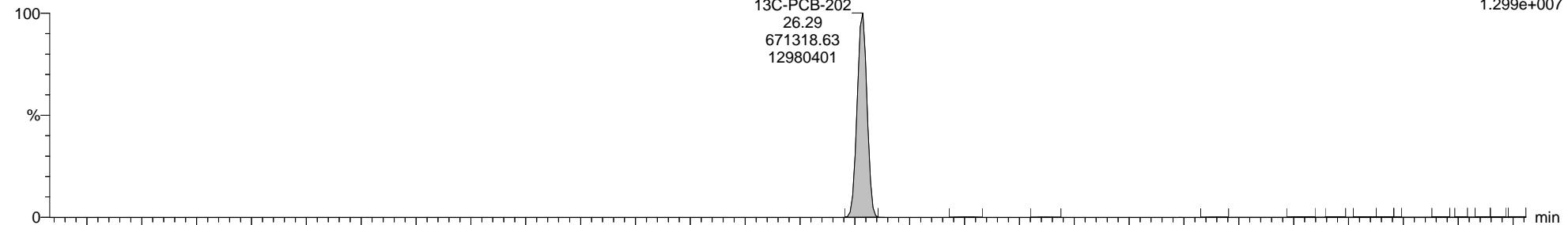
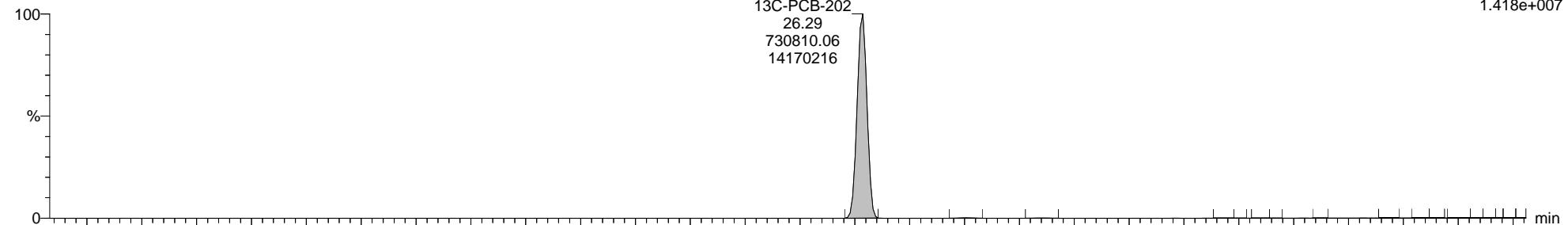
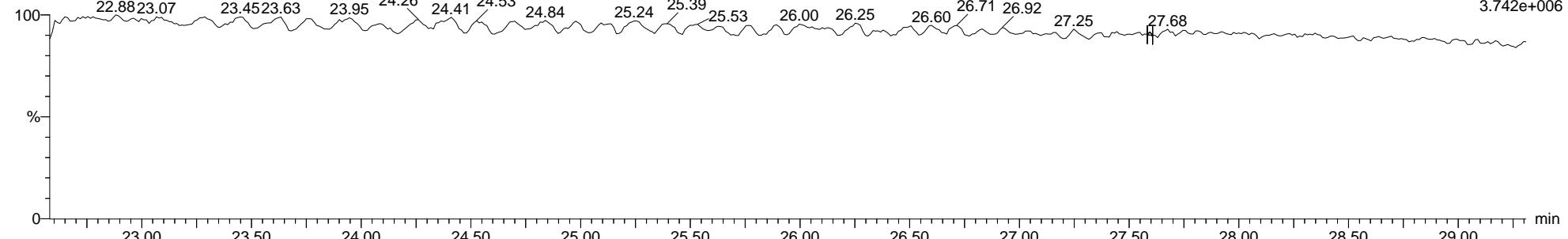
Name: 5-150917B05, Date: 17-Sep-2015, Time: 18:07:06, ID: H5-15-CS3-011, Description: 1668A-CS#3-015, Vial: Tray1:3

**PCB-202**5-150917B05 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CS3-0115-150917B05 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CS3-0115-150917B05 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CS3-011

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

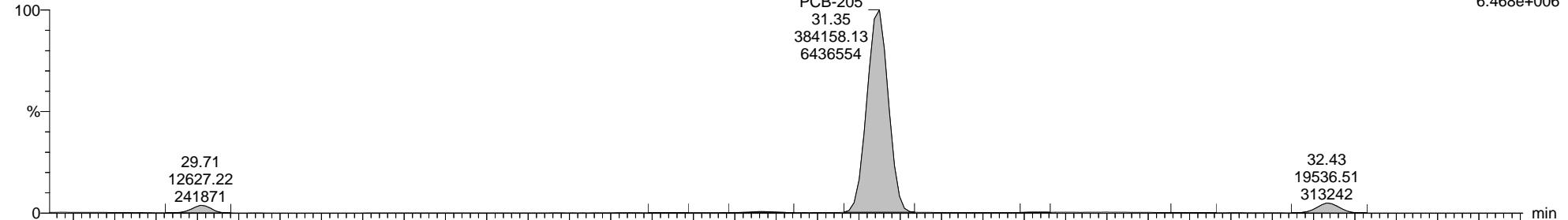
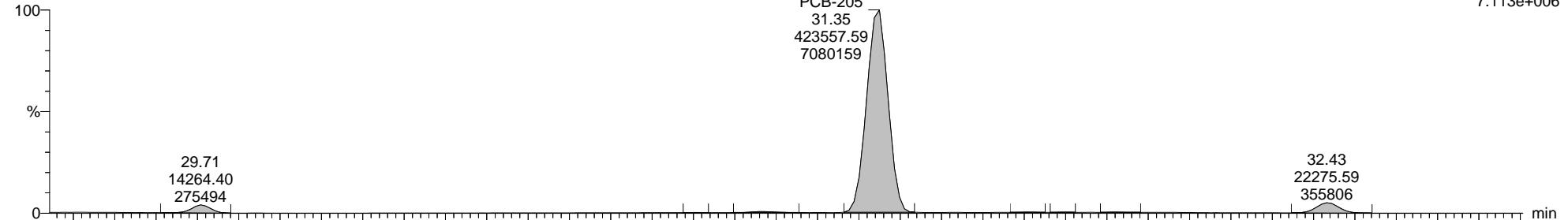
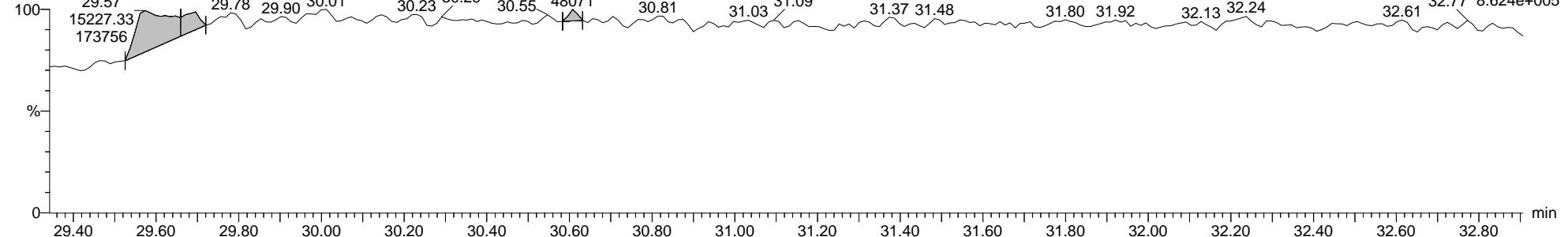
**Name: 5-150917B05, Date: 17-Sep-2015, Time: 18:07:06, ID: H5-15-CS3-011, Description: 1668A-CS#3-015, Vial: Tray1:3****13C-PCB-202**5-150917B05 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CS3-0115-150917B05 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CS3-0115-150917B05 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CS3-011

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Name: 5-150917B05, Date: 17-Sep-2015, Time: 18:07:06, ID: H5-15-CS3-011, Description: 1668A-CS#3-015, Vial: Tray1:3

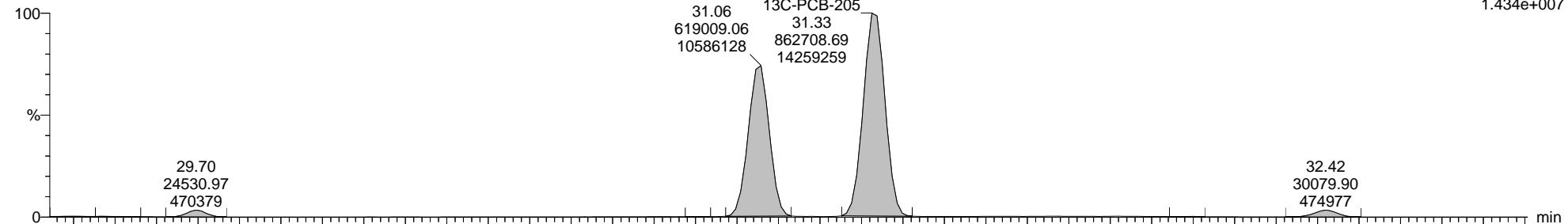
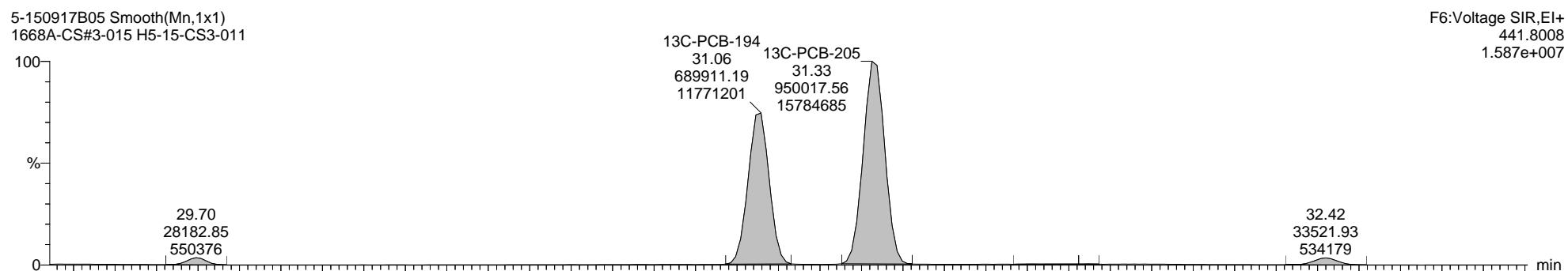
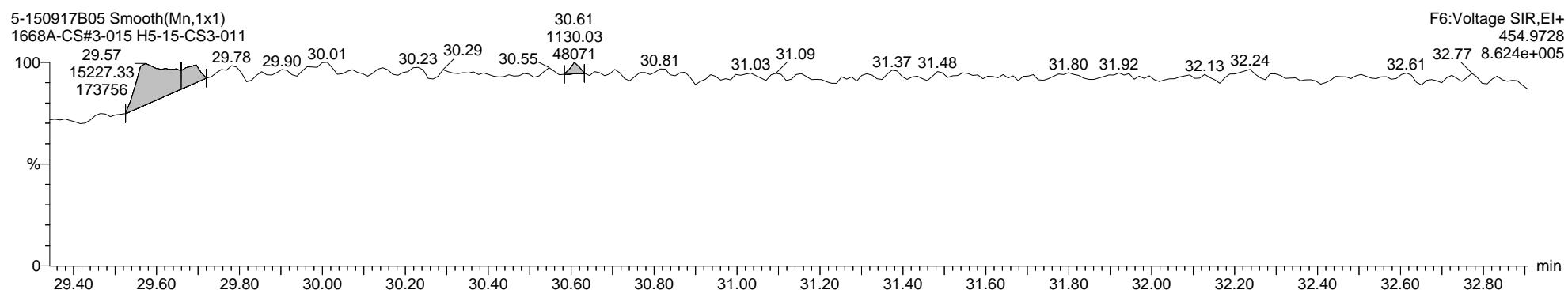
**PCB-205**5-150917B05 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CS3-011F6:Voltage SIR,EI+  
427.7635  
6.468e+0065-150917B05 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CS3-011F6:Voltage SIR,EI+  
429.7606  
7.113e+0065-150917B05 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CS3-011F6:Voltage SIR,EI+  
454.9728  
8.624e+005

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Name: 5-150917B05, Date: 17-Sep-2015, Time: 18:07:06, ID: H5-15-CS3-011, Description: 1668A-CS#3-015, Vial: Tray1:3

**13C-PCB-205**5-150917B05 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CS3-0115-150917B05 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CS3-0115-150917B05 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CS3-011

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Name: 5-150917B05, Date: 17-Sep-2015, Time: 18:07:06, ID: H5-15-CS3-011, Description: 1668A-CS#3-015, Vial: Tray1:3

**PCB-208**

5-150917B05 Smooth(Mn,1x1)

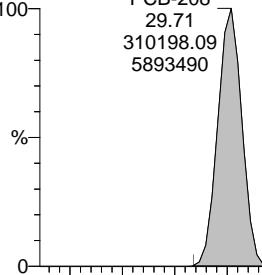
1668A-CS#3-015 H5-15-CS3-011

PCB-208

29.71

310198.09

5893490



F6:Voltage SIR,EI+

461.7246

5.906e+006

PCB-206

32.43

209923.20

3239889

F6:Voltage SIR,EI+

463.7216

7.415e+006

5-150917B05 Smooth(Mn,1x1)

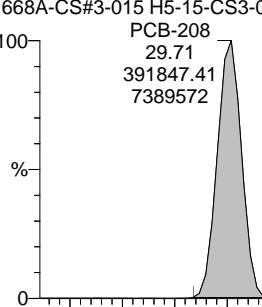
1668A-CS#3-015 H5-15-CS3-011

PCB-208

29.71

391847.41

7389572



PCB-206

32.43

267447.00

4123438

F6:Voltage SIR,EI+

454.9728

8.624e+005

5-150917B05 Smooth(Mn,1x1)

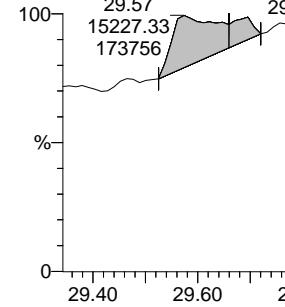
1668A-CS#3-015 H5-15-CS3-011

PCB-208

29.57

15227.33

173756



Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

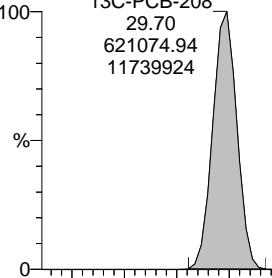
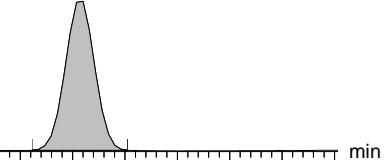
Name: 5-150917B05, Date: 17-Sep-2015, Time: 18:07:06, ID: H5-15-CS3-011, Description: 1668A-CS#3-015, Vial: Tray1:3

**13C-PCB-208**

5-150917B05 Smooth(Mn,1x1)

1668A-CS#3-015 H5-15-CS3-011

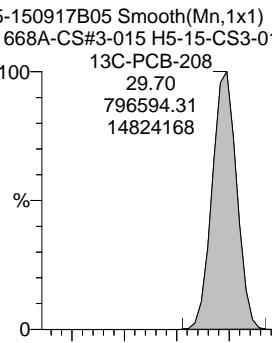
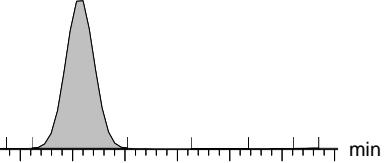
13C-PCB-208

29.70  
621074.94  
11739924F6:Voltage SIR,EI+  
473.7648  
1.176e+00713C-PCB-206  
32.42  
447180.31  
6802785

5-150917B05 Smooth(Mn,1x1)

1668A-CS#3-015 H5-15-CS3-011

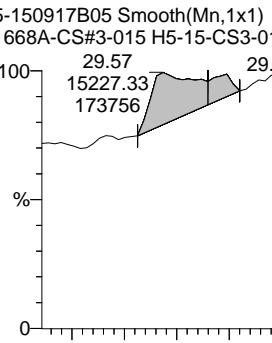
13C-PCB-208

29.70  
796594.31  
14824168F6:Voltage SIR,EI+  
475.7619  
1.484e+00713C-PCB-206  
32.42  
564119.31  
8496578

5-150917B05 Smooth(Mn,1x1)

1668A-CS#3-015 H5-15-CS3-011

13C-PCB-208

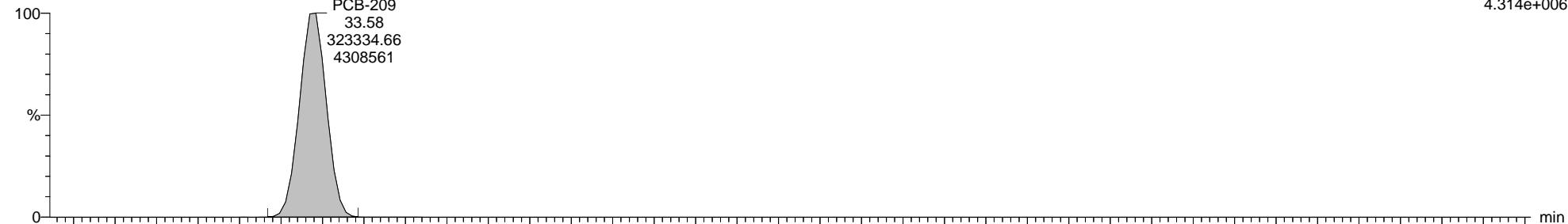
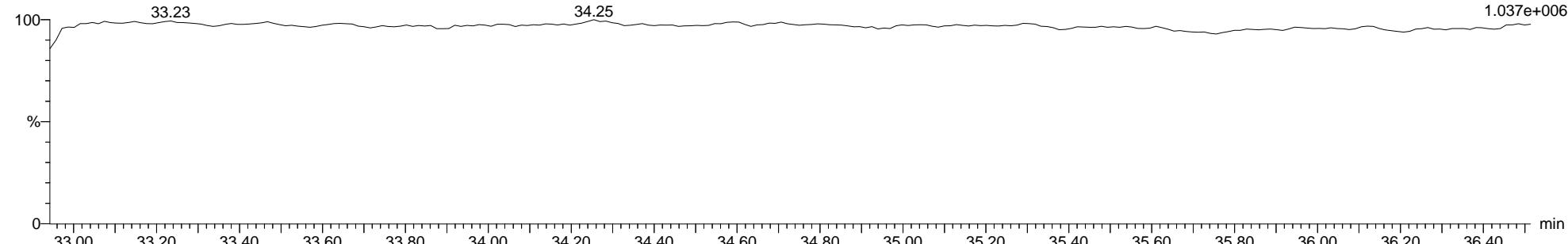
29.57  
15227.33  
17375629.78  
29.90  
30.01  
30.23  
30.29  
30.55  
30.61  
1130.03  
48071  
30.81  
31.03  
31.09F6:Voltage SIR,EI+  
454.9728  
8.624e+00532.61  
32.77  
8.624e+005

29.40 29.60 29.80 30.00 30.20 30.40 30.60 30.80 31.00 31.20 31.40 31.60 31.80 32.00 32.20 32.40 32.60 32.80 min

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

**Name: 5-150917B05, Date: 17-Sep-2015, Time: 18:07:06, ID: H5-15-CS3-011, Description: 1668A-CS#3-015, Vial: Tray1:3****PCB-209**5-150917B05 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CS3-0115-150917B05 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CS3-0115-150917B05 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CS3-011

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

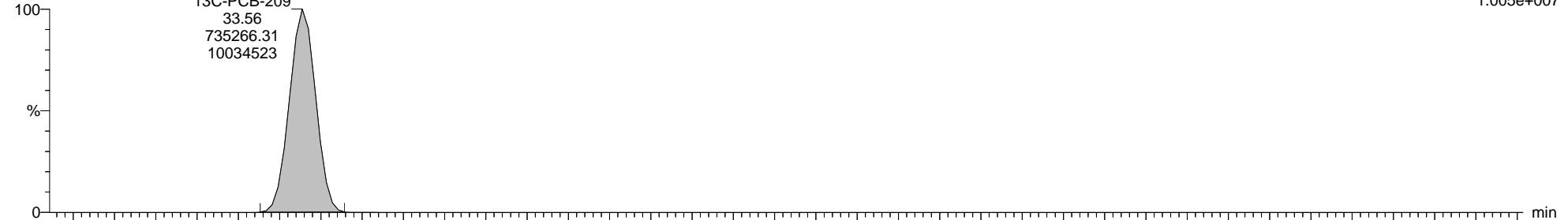
Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Name: 5-150917B05, Date: 17-Sep-2015, Time: 18:07:06, ID: H5-15-CS3-011, Description: 1668A-CS#3-015, Vial: Tray1:3

**13C-PCB-209**

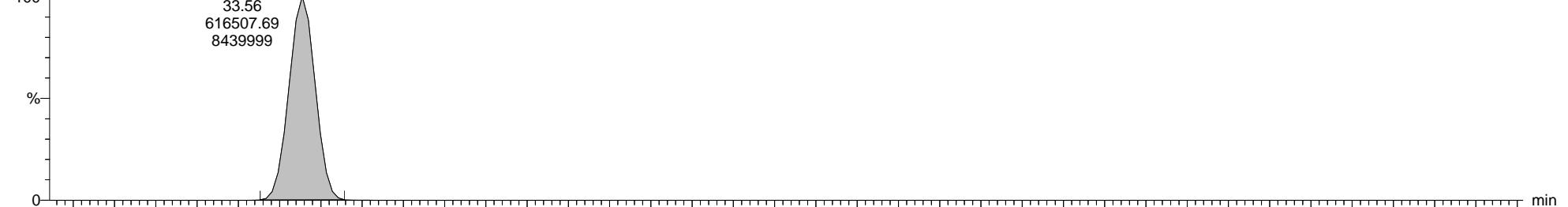
5-150917B05 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CS3-011  
13C-PCB-209  
33.56  
735266.31  
10034523

F7:Voltage SIR,EI+  
509.7229  
1.005e+007



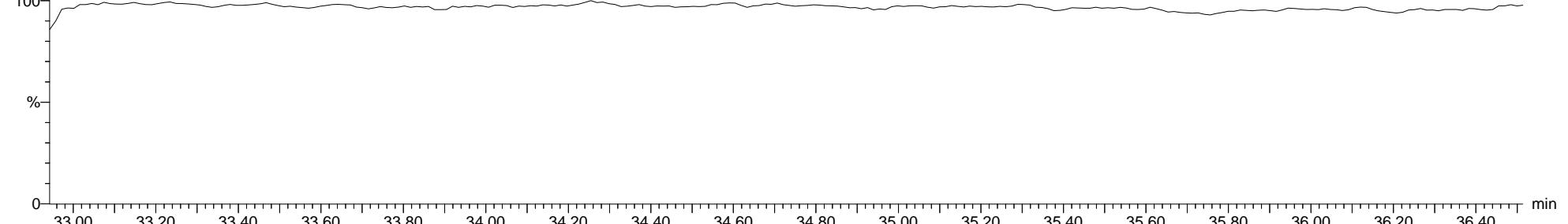
5-150917B05 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CS3-011  
13C-PCB-209  
33.56  
616507.69  
8439999

F7:Voltage SIR,EI+  
511.7199  
8.457e+006



5-150917B05 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CS3-011  
33.23

F7:Voltage SIR,EI+  
516.9697  
1.037e+006



Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

**Name: 5-150917B04, Date: 17-Sep-2015, Time: 17:25:46, ID: H5-15-CS4-011, Description: 1668A-CS#4-015, Vial: Tray1:8****PCB-1**

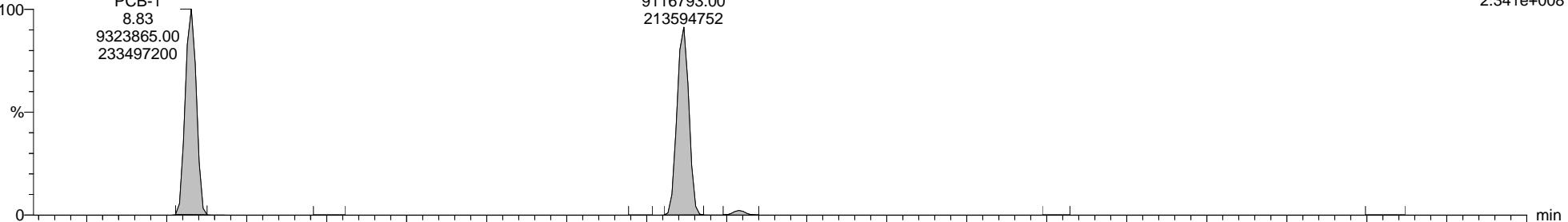
5-150917B04 Smooth(Mn,1x1)

1668A-CS#4-015 H5-15-CS4-011

PCB-1 8.83

9323865.00

233497200



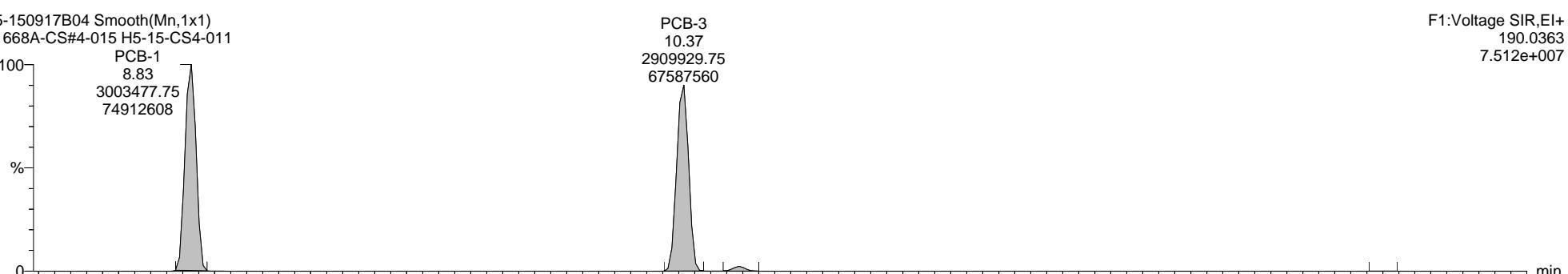
5-150917B04 Smooth(Mn,1x1)

1668A-CS#4-015 H5-15-CS4-011

PCB-1 8.83

3003477.75

74912608

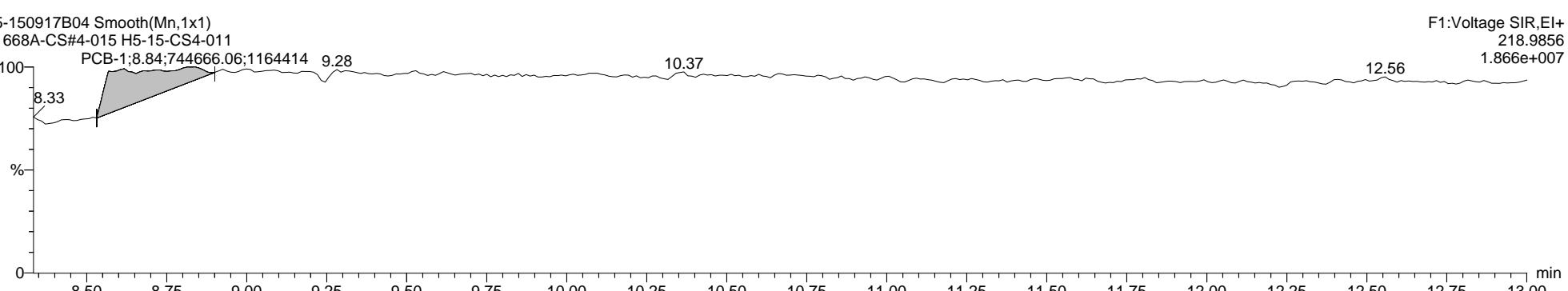


5-150917B04 Smooth(Mn,1x1)

1668A-CS#4-015 H5-15-CS4-011

PCB-1:8.84;744666.06;1164414 9.28

8.33



Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

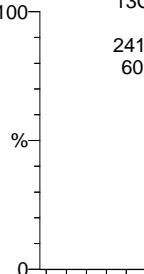
Name: 5-150917B04, Date: 17-Sep-2015, Time: 17:25:46, ID: H5-15-CS4-011, Description: 1668A-CS#4-015, Vial: Tray1:8

**13C-PCB-1**

5-150917B04 Smooth(Mn,1x1)

1668A-CS#4-015 H5-15-CS4-011

13C-PCB-1

8.81  
2410267.00  
60117092

13C-PCB-3

10.35

2206663.50

52250260

F1:Voltage SIR,EI+

200.0795

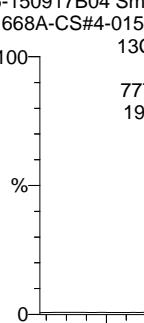
6.028e+007

min

5-150917B04 Smooth(Mn,1x1)

1668A-CS#4-015 H5-15-CS4-011

13C-PCB-1

8.81  
777641.56  
19455804

13C-PCB-3

10.35

718144.50

16990950

F1:Voltage SIR,EI+

202.0766

1.965e+007

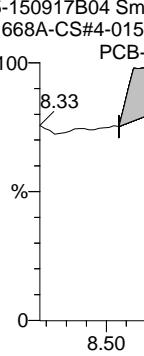
min

5-150917B04 Smooth(Mn,1x1)

1668A-CS#4-015 H5-15-CS4-011

PCB-1:8.84;744666.06;1164414 9.28

8.33



F1:Voltage SIR,EI+

218.9856

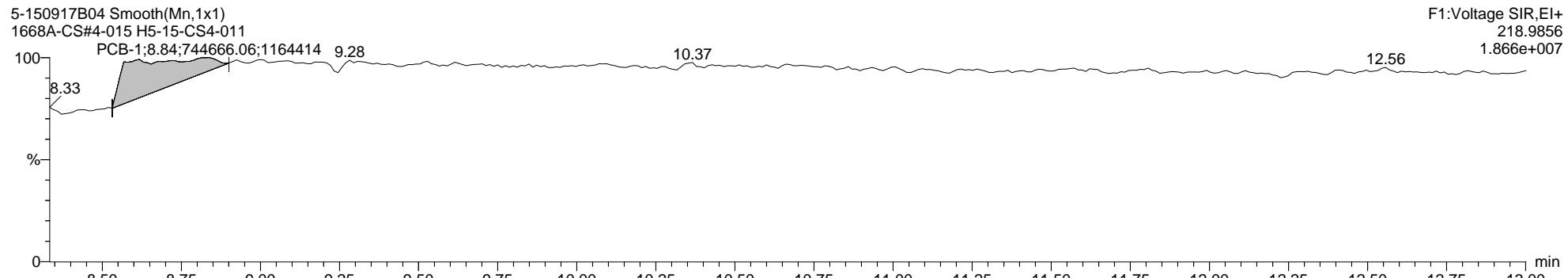
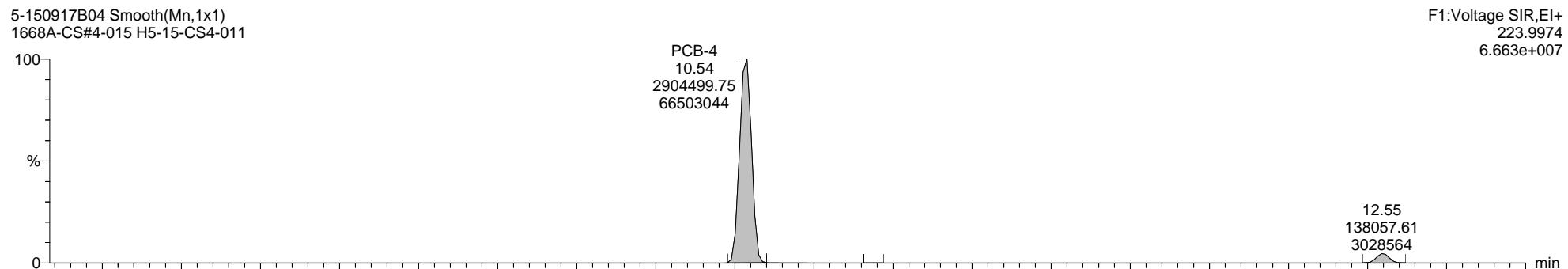
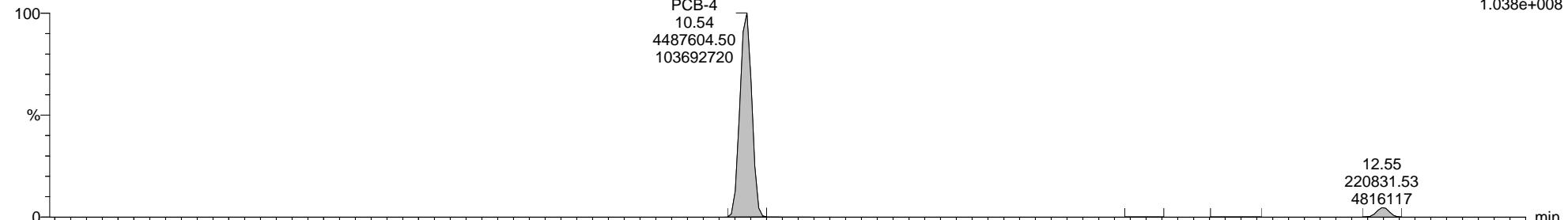
1.866e+007

min

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

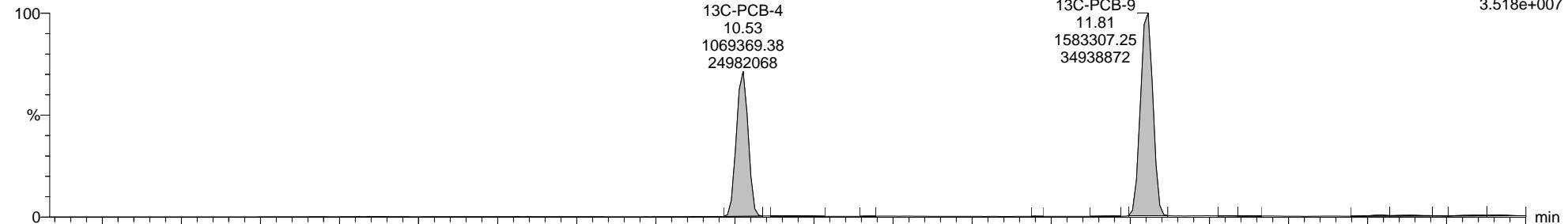
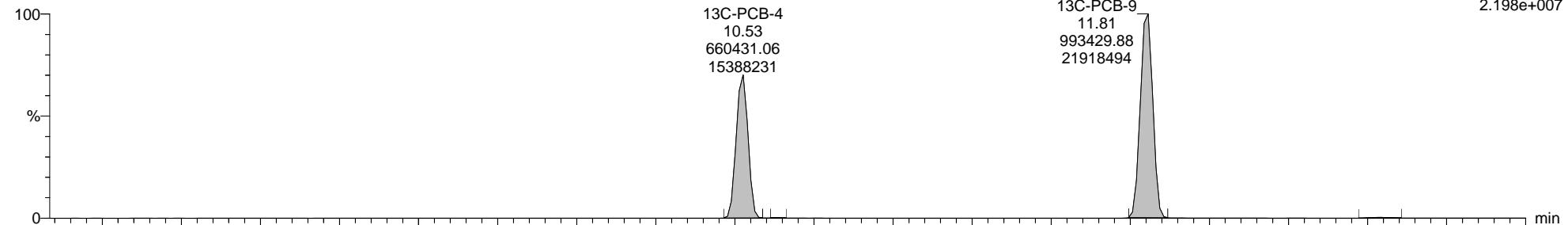
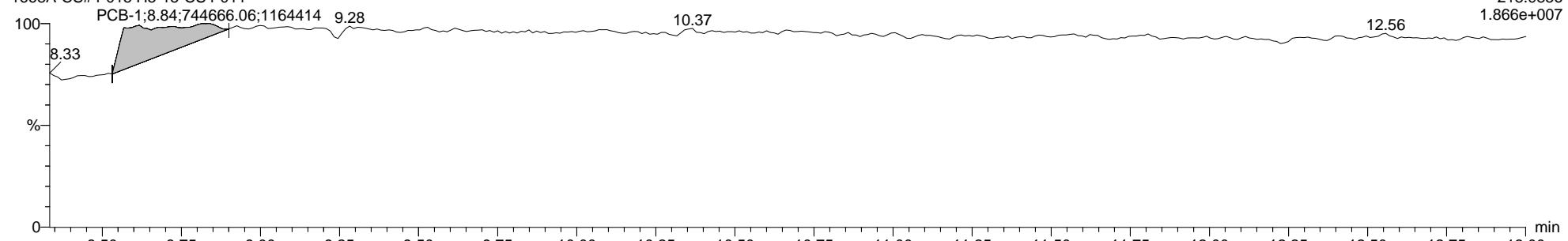
Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

**Name: 5-150917B04, Date: 17-Sep-2015, Time: 17:25:46, ID: H5-15-CS4-011, Description: 1668A-CS#4-015, Vial: Tray1:8****PCB-4**5-150917B04 Smooth(Mn,1x1)  
1668A-CS#4-015 H5-15-CS4-011

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

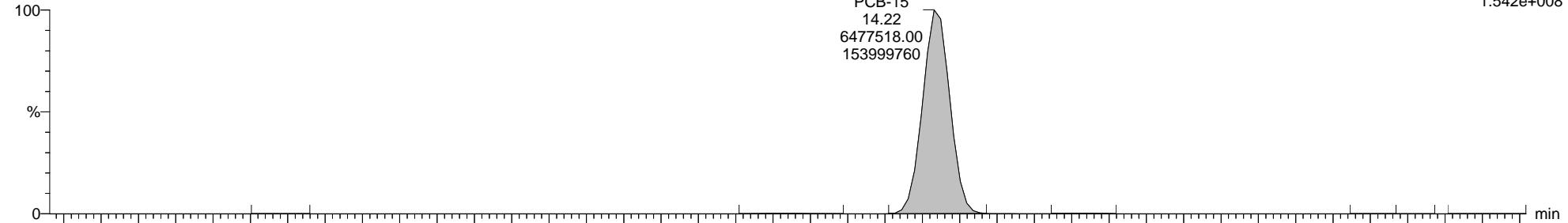
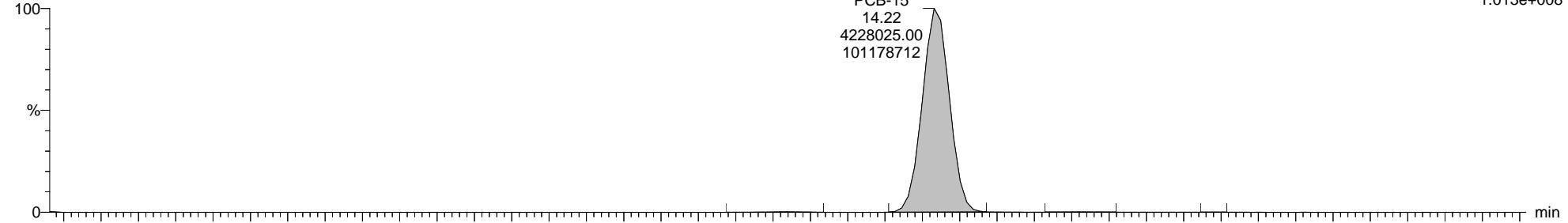
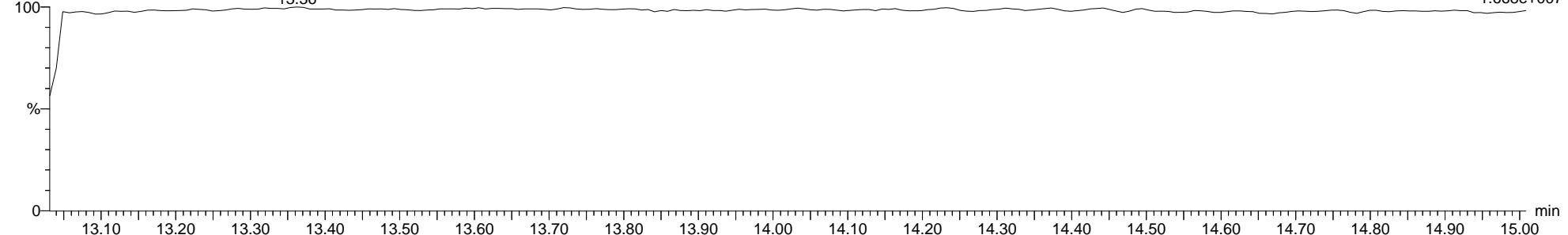
Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

**Name: 5-150917B04, Date: 17-Sep-2015, Time: 17:25:46, ID: H5-15-CS4-011, Description: 1668A-CS#4-015, Vial: Tray1:8****13C-PCB-4**5-150917B04 Smooth(Mn,1x1)  
1668A-CS#4-015 H5-15-CS4-0115-150917B04 Smooth(Mn,1x1)  
1668A-CS#4-015 H5-15-CS4-0115-150917B04 Smooth(Mn,1x1)  
1668A-CS#4-015 H5-15-CS4-011

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

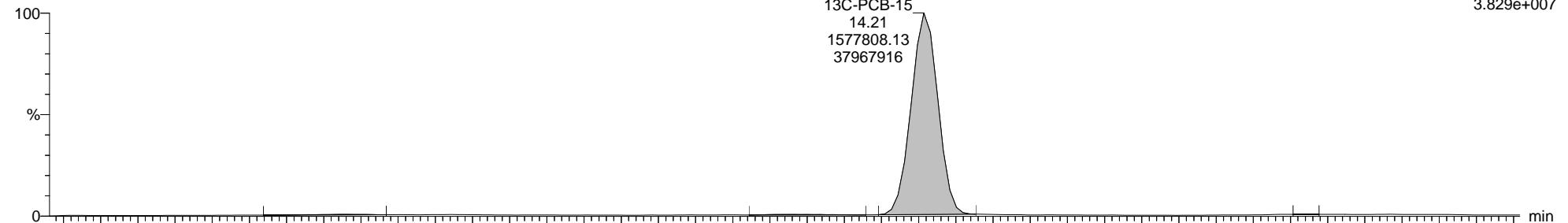
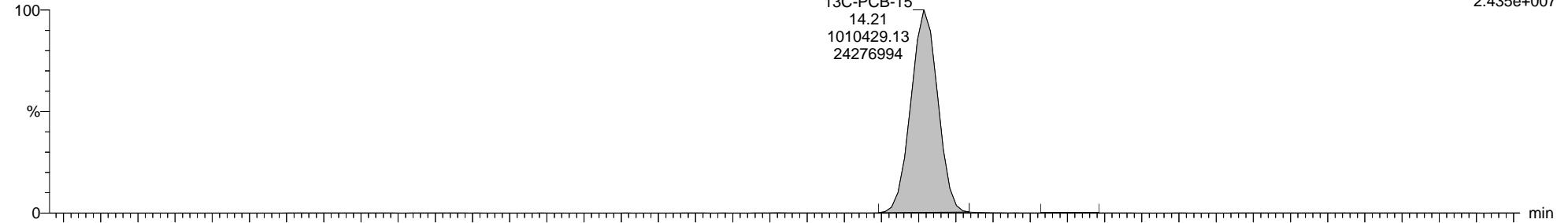
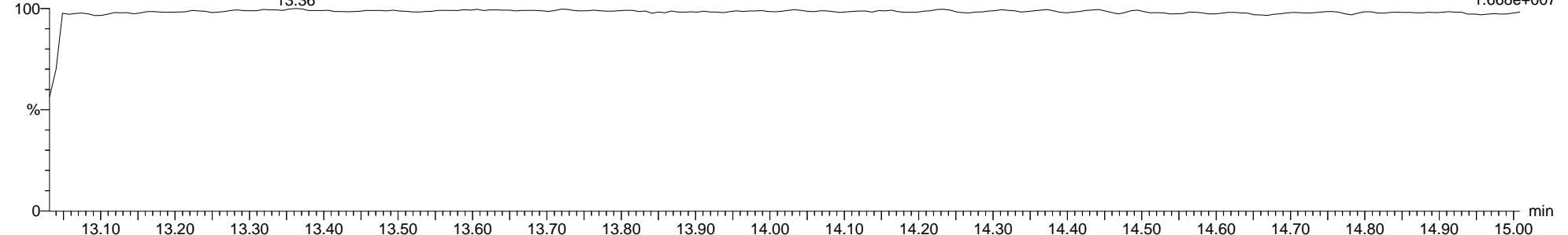
Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

**Name: 5-150917B04, Date: 17-Sep-2015, Time: 17:25:46, ID: H5-15-CS4-011, Description: 1668A-CS#4-015, Vial: Tray1:8****PCB-15**5-150917B04 Smooth(Mn,1x1)  
1668A-CS#4-015 H5-15-CS4-011F2:Voltage SIR,EI+  
222.0003  
1.542e+0085-150917B04 Smooth(Mn,1x1)  
1668A-CS#4-015 H5-15-CS4-011F2:Voltage SIR,EI+  
223.9974  
1.013e+0085-150917B04 Smooth(Mn,1x1)  
1668A-CS#4-015 H5-15-CS4-011F2:Voltage SIR,EI+  
242.9856  
1.668e+007

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

**Name: 5-150917B04, Date: 17-Sep-2015, Time: 17:25:46, ID: H5-15-CS4-011, Description: 1668A-CS#4-015, Vial: Tray1:8****13C-PCB-15**5-150917B04 Smooth(Mn,1x1)  
1668A-CS#4-015 H5-15-CS4-011F2:Voltage SIR,EI+  
234.0406  
3.829e+0075-150917B04 Smooth(Mn,1x1)  
1668A-CS#4-015 H5-15-CS4-011F2:Voltage SIR,EI+  
236.0376  
2.435e+0075-150917B04 Smooth(Mn,1x1)  
1668A-CS#4-015 H5-15-CS4-011F2:Voltage SIR,EI+  
242.9856  
1.668e+007

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

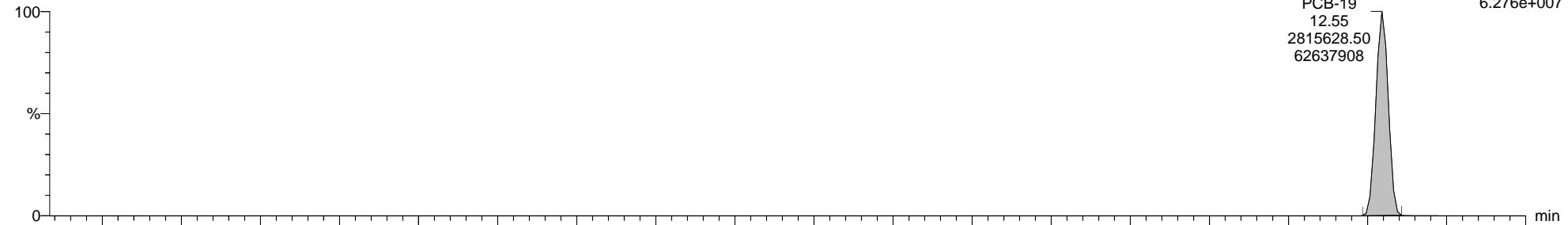
Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

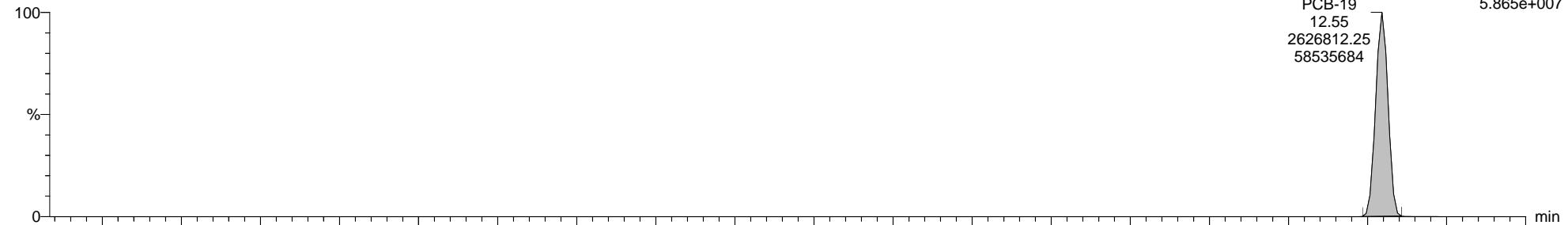
Name: 5-150917B04, Date: 17-Sep-2015, Time: 17:25:46, ID: H5-15-CS4-011, Description: 1668A-CS#4-015, Vial: Tray1:8

### PCB-19

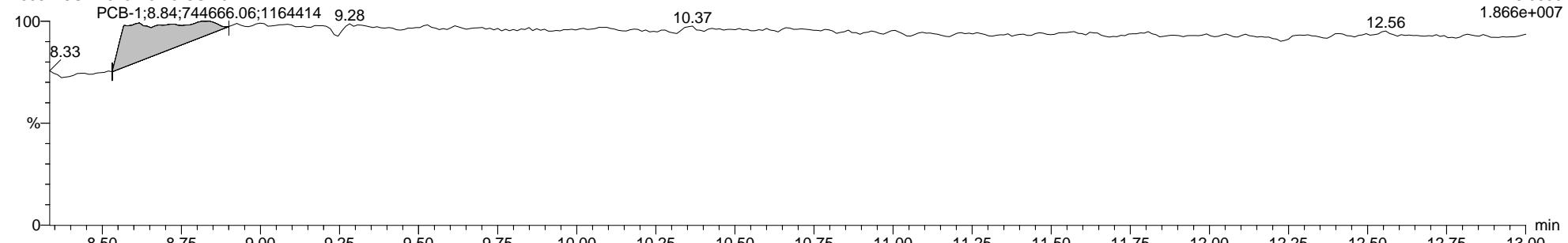
5-150917B04 Smooth(Mn,1x1)  
1668A-CS#4-015 H5-15-CS4-011



5-150917B04 Smooth(Mn,1x1)  
1668A-CS#4-015 H5-15-CS4-011



5-150917B04 Smooth(Mn,1x1)  
1668A-CS#4-015 H5-15-CS4-011

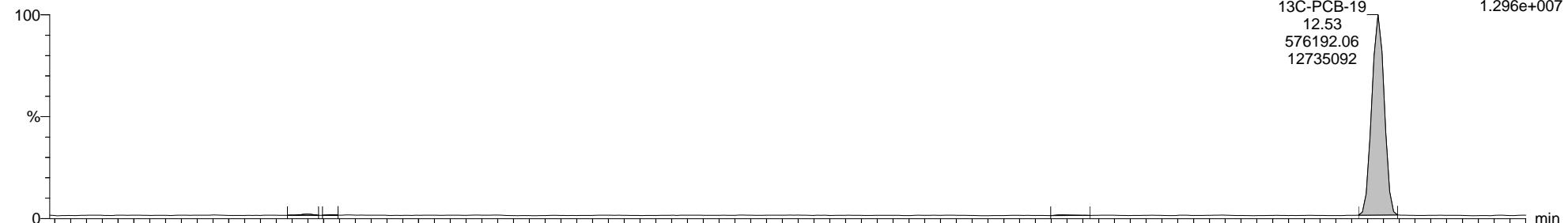
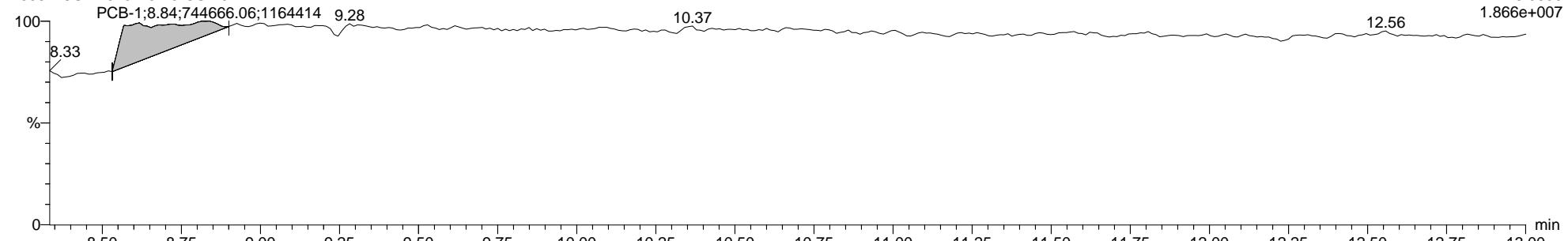


Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Name: 5-150917B04, Date: 17-Sep-2015, Time: 17:25:46, ID: H5-15-CS4-011, Description: 1668A-CS#4-015, Vial: Tray1:8

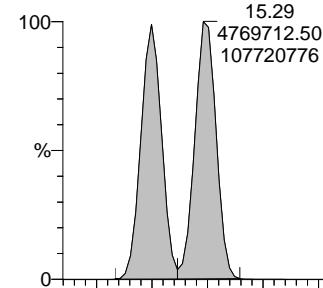
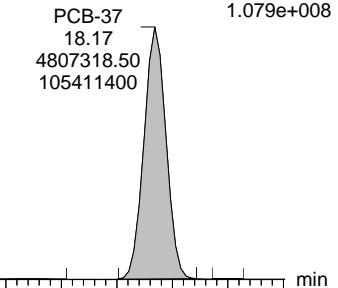
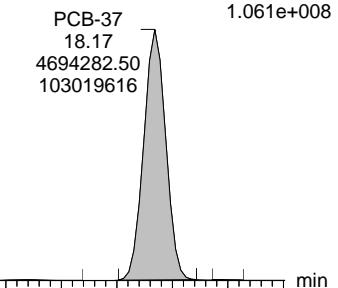
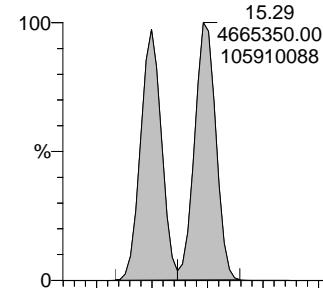
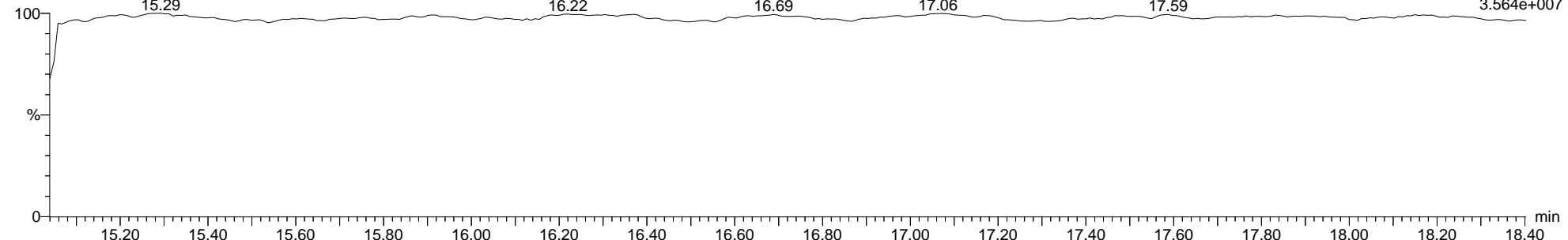
**13C-PCB-19**5-150917B04 Smooth(Mn,1x1)  
1668A-CS#4-015 H5-15-CS4-0115-150917B04 Smooth(Mn,1x1)  
1668A-CS#4-015 H5-15-CS4-0115-150917B04 Smooth(Mn,1x1)  
1668A-CS#4-015 H5-15-CS4-011

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Name: 5-150917B04, Date: 17-Sep-2015, Time: 17:25:46, ID: H5-15-CS4-011, Description: 1668A-CS#4-015, Vial: Tray1:8

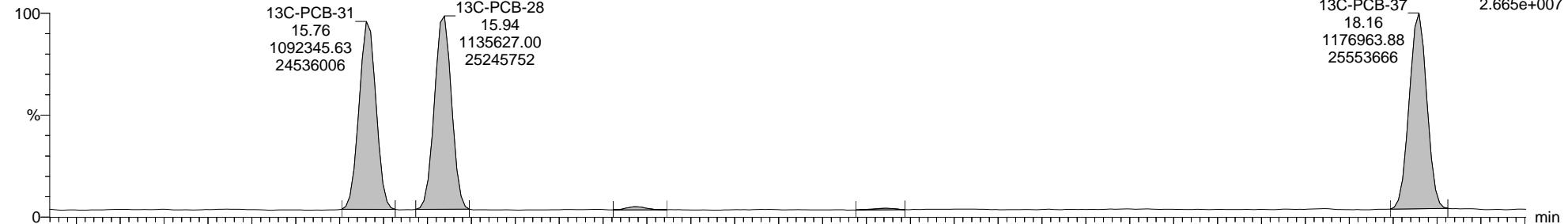
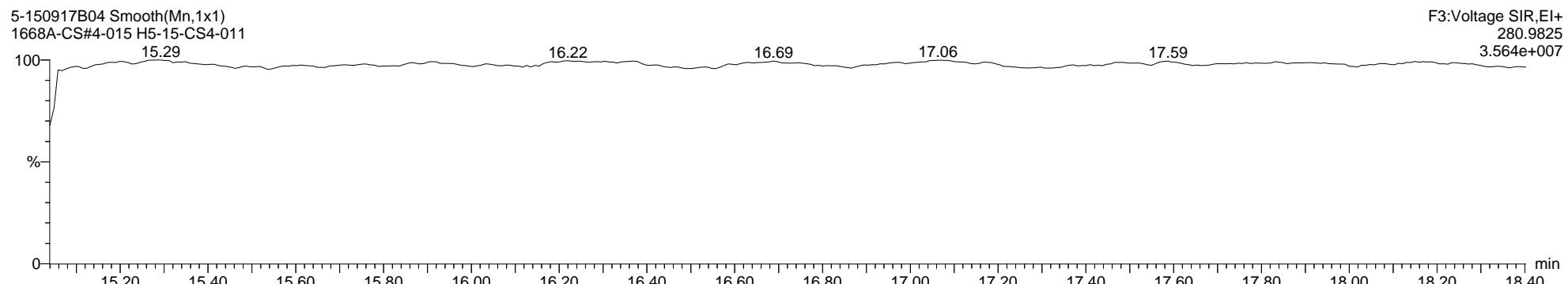
**PCB-37**5-150917B04 Smooth(Mn,1x1)  
1668A-CS#4-015 H5-15-CS4-011F3:Voltage SIR,EI+  
255.9613  
1.079e+008F3:Voltage SIR,EI+  
257.9584  
1.061e+0085-150917B04 Smooth(Mn,1x1)  
1668A-CS#4-015 H5-15-CS4-011F3:Voltage SIR,EI+  
280.9825  
3.564e+0075-150917B04 Smooth(Mn,1x1)  
1668A-CS#4-015 H5-15-CS4-011

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

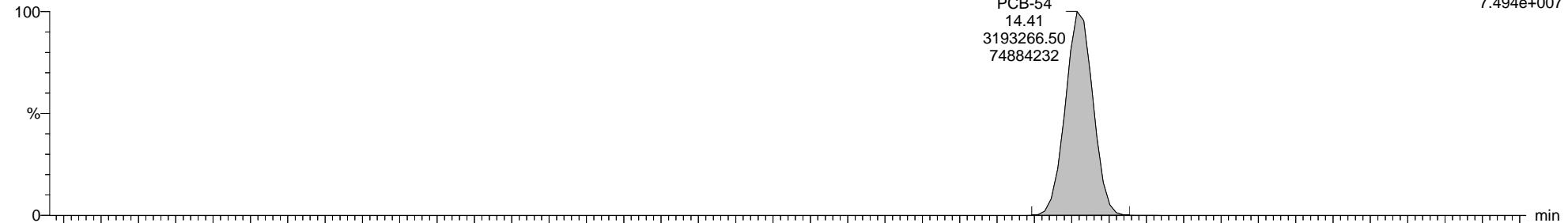
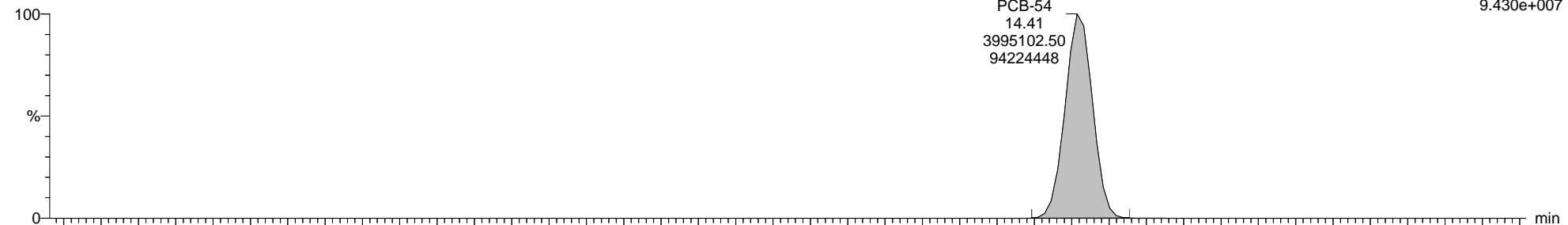
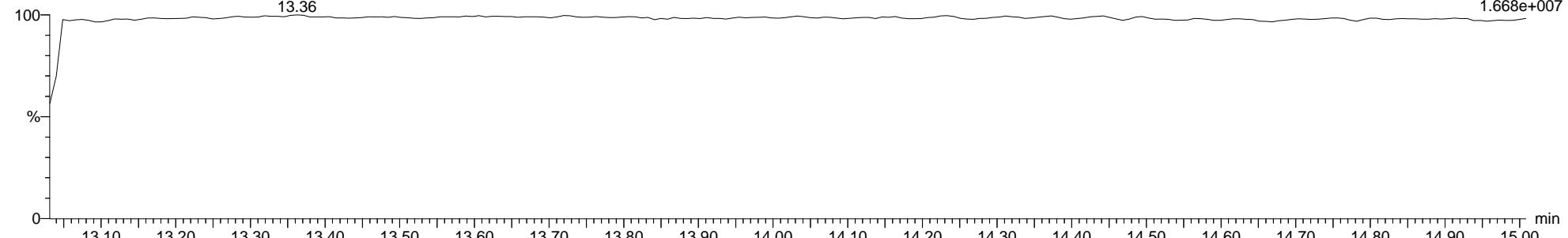
Name: 5-150917B04, Date: 17-Sep-2015, Time: 17:25:46, ID: H5-15-CS4-011, Description: 1668A-CS#4-015, Vial: Tray1:8

**13C-PCB-37**5-150917B04 Smooth(Mn,1x1)  
1668A-CS#4-015 H5-15-CS4-0115-150917B04 Smooth(Mn,1x1)  
1668A-CS#4-015 H5-15-CS4-0115-150917B04 Smooth(Mn,1x1)  
1668A-CS#4-015 H5-15-CS4-011

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

**Name: 5-150917B04, Date: 17-Sep-2015, Time: 17:25:46, ID: H5-15-CS4-011, Description: 1668A-CS#4-015, Vial: Tray1:8****PCB-54**5-150917B04 Smooth(Mn,1x1)  
1668A-CS#4-015 H5-15-CS4-0115-150917B04 Smooth(Mn,1x1)  
1668A-CS#4-015 H5-15-CS4-0115-150917B04 Smooth(Mn,1x1)  
1668A-CS#4-015 H5-15-CS4-011

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

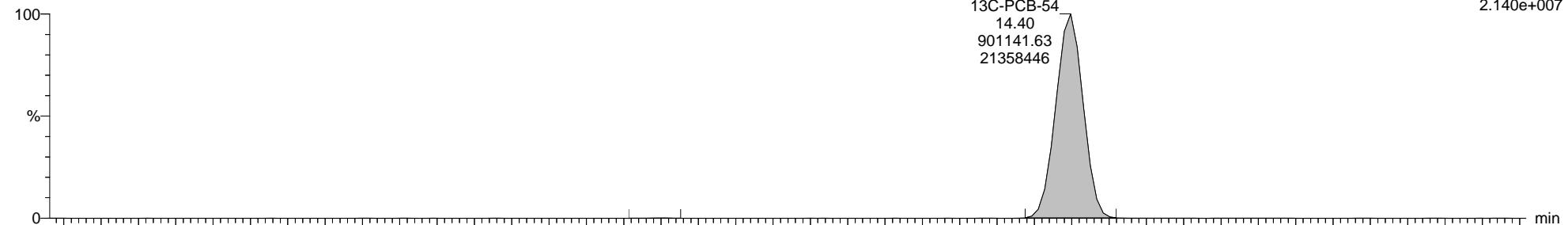
Name: 5-150917B04, Date: 17-Sep-2015, Time: 17:25:46, ID: H5-15-CS4-011, Description: 1668A-CS#4-015, Vial: Tray1:8

### 13C-PCB-54

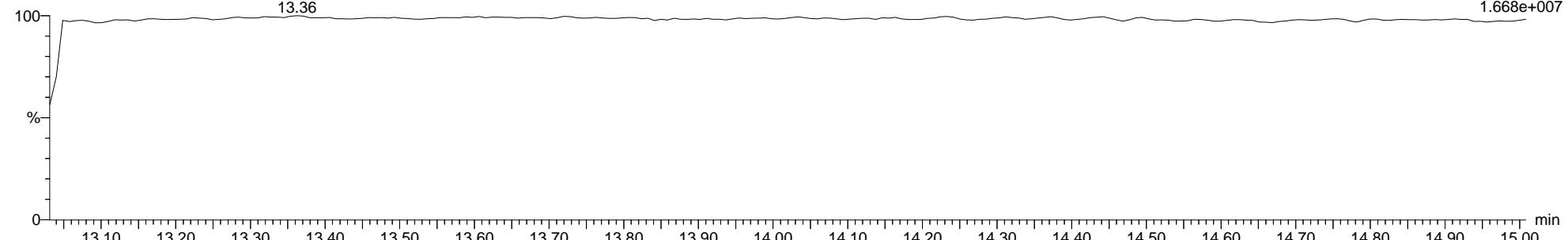
5-150917B04 Smooth(Mn,1x1)  
1668A-CS#4-015 H5-15-CS4-011



5-150917B04 Smooth(Mn,1x1)  
1668A-CS#4-015 H5-15-CS4-011



5-150917B04 Smooth(Mn,1x1)  
1668A-CS#4-015 H5-15-CS4-011

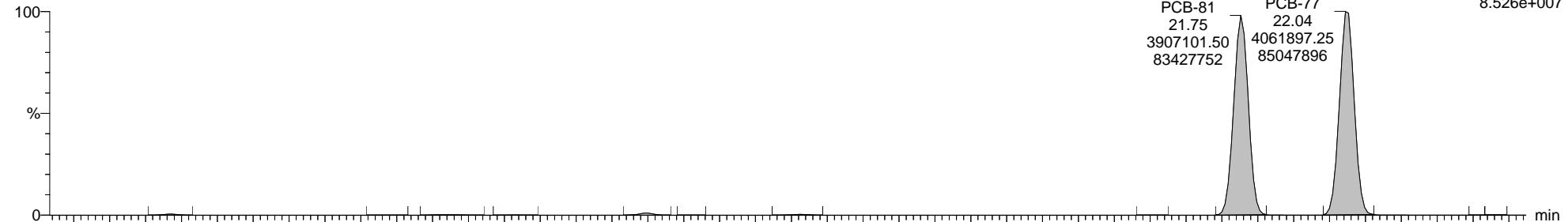
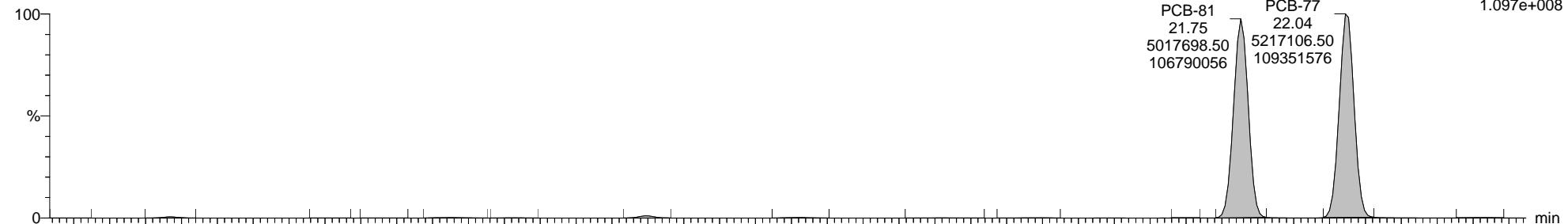
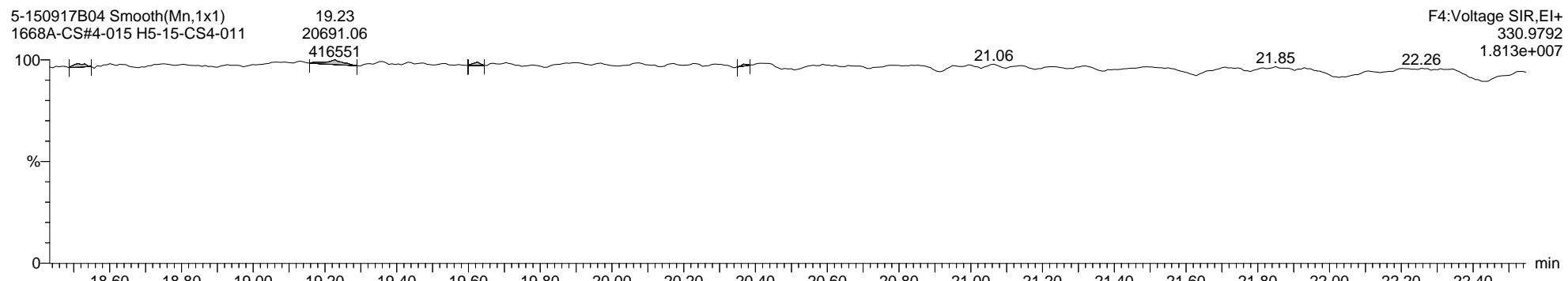


Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Name: 5-150917B04, Date: 17-Sep-2015, Time: 17:25:46, ID: H5-15-CS4-011, Description: 1668A-CS#4-015, Vial: Tray1:8

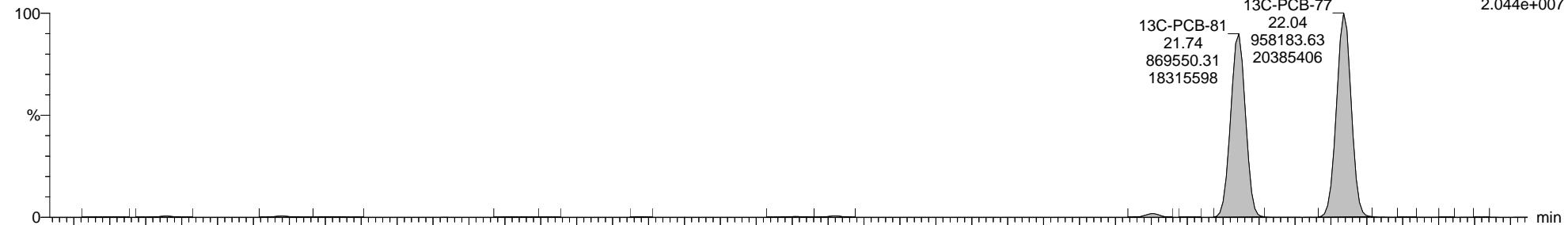
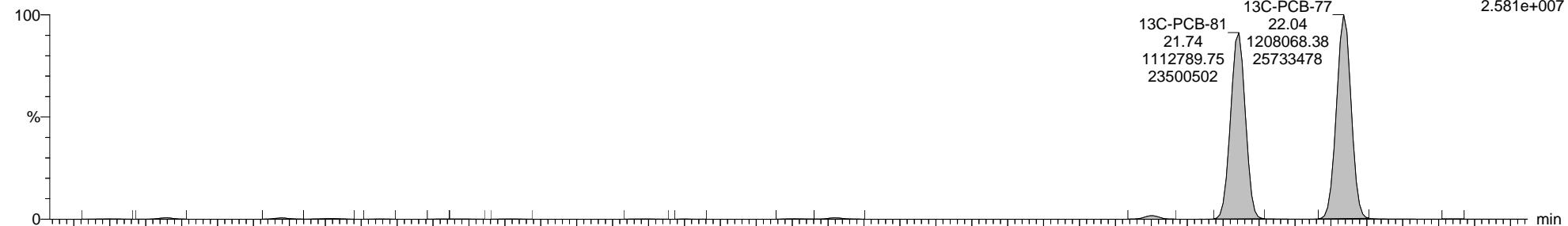
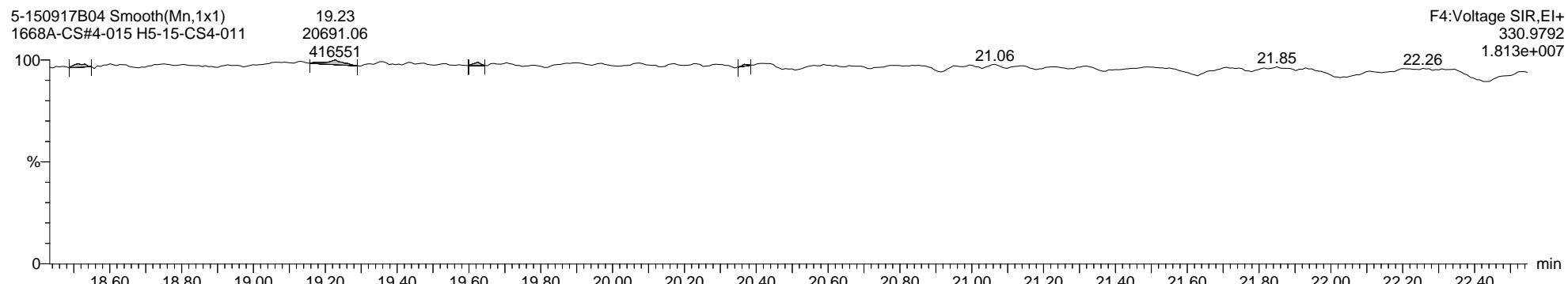
**PCB-81**5-150917B04 Smooth(Mn,1x1)  
1668A-CS#4-015 H5-15-CS4-0115-150917B04 Smooth(Mn,1x1)  
1668A-CS#4-015 H5-15-CS4-0115-150917B04 Smooth(Mn,1x1)  
1668A-CS#4-015 H5-15-CS4-011

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

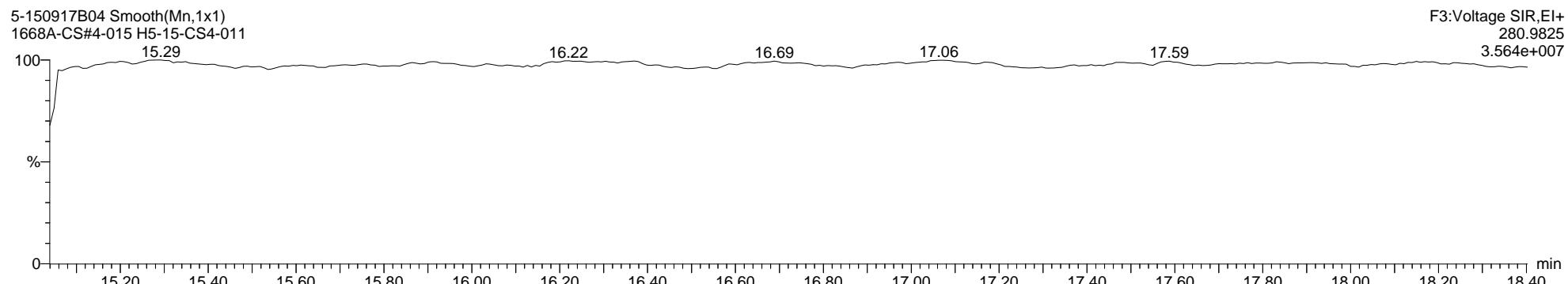
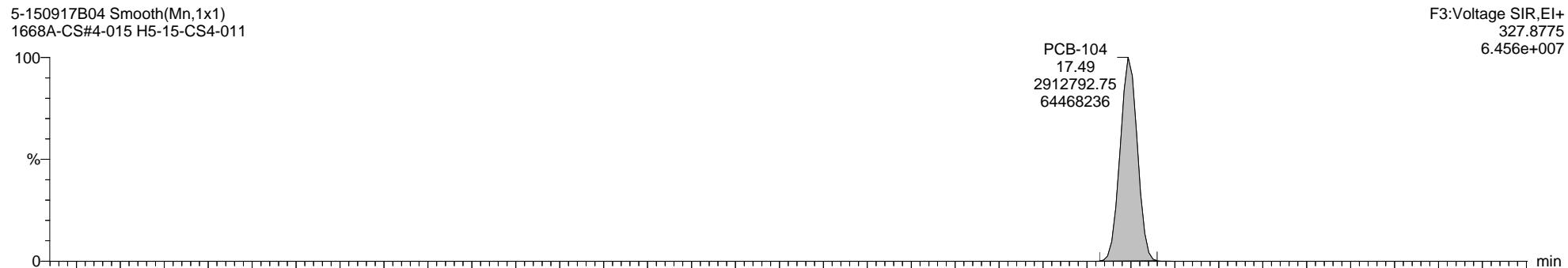
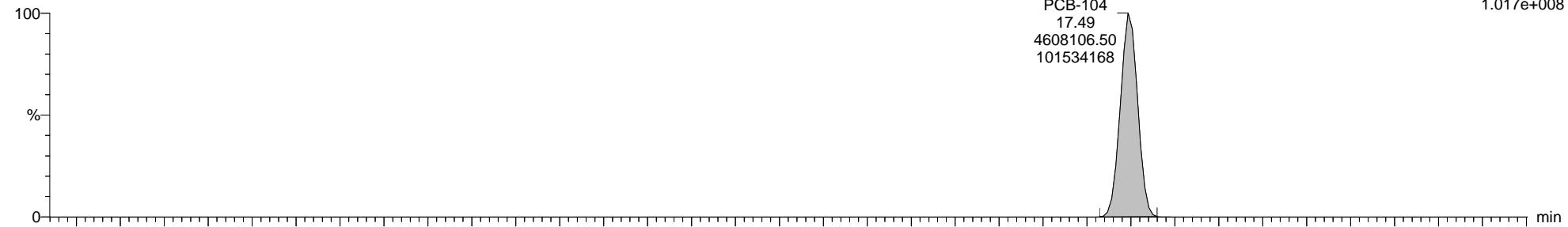
Name: 5-150917B04, Date: 17-Sep-2015, Time: 17:25:46, ID: H5-15-CS4-011, Description: 1668A-CS#4-015, Vial: Tray1:8

**13C-PCB-81**5-150917B04 Smooth(Mn,1x1)  
1668A-CS#4-015 H5-15-CS4-0115-150917B04 Smooth(Mn,1x1)  
1668A-CS#4-015 H5-15-CS4-0115-150917B04 Smooth(Mn,1x1)  
1668A-CS#4-015 H5-15-CS4-011

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

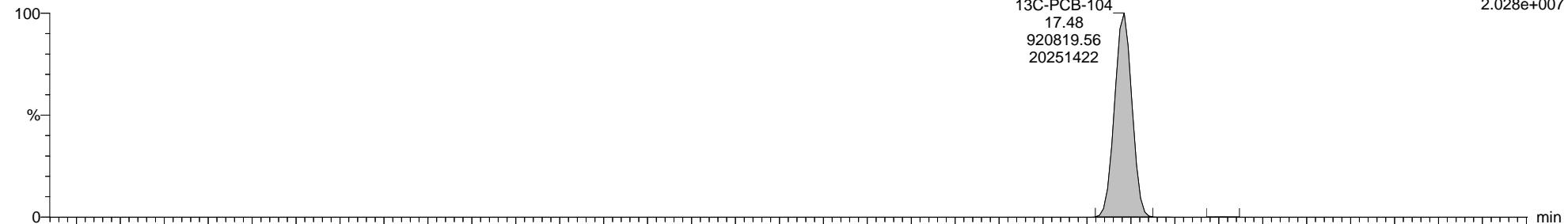
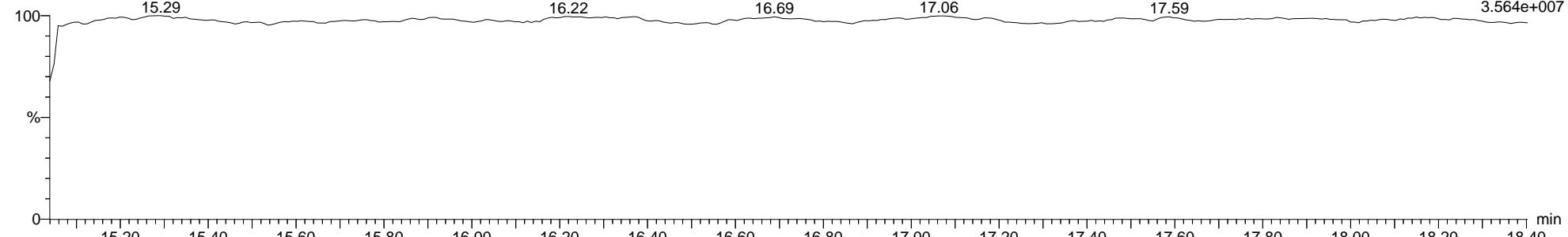
Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

**Name: 5-150917B04, Date: 17-Sep-2015, Time: 17:25:46, ID: H5-15-CS4-011, Description: 1668A-CS#4-015, Vial: Tray1:8****PCB-104**5-150917B04 Smooth(Mn,1x1)  
1668A-CS#4-015 H5-15-CS4-011

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

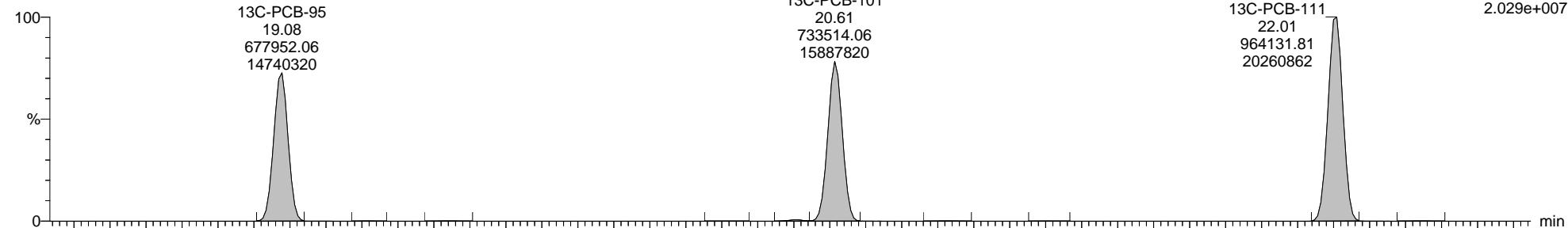
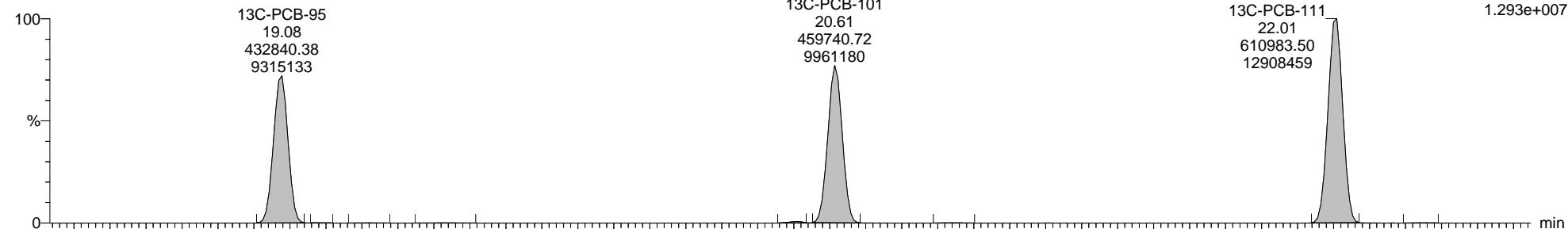
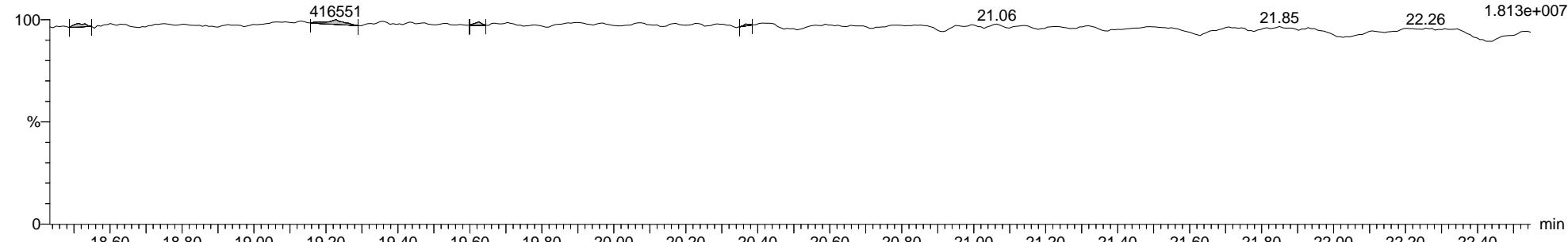
**Name: 5-150917B04, Date: 17-Sep-2015, Time: 17:25:46, ID: H5-15-CS4-011, Description: 1668A-CS#4-015, Vial: Tray1:8****13C-PCB-104**5-150917B04 Smooth(Mn,1x1)  
1668A-CS#4-015 H5-15-CS4-0115-150917B04 Smooth(Mn,1x1)  
1668A-CS#4-015 H5-15-CS4-0115-150917B04 Smooth(Mn,1x1)  
1668A-CS#4-015 H5-15-CS4-011

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Name: 5-150917B04, Date: 17-Sep-2015, Time: 17:25:46, ID: H5-15-CS4-011, Description: 1668A-CS#4-015, Vial: Tray1:8

**13C-PCB-111**5-150917B04 Smooth(Mn,1x1)  
1668A-CS#4-015 H5-15-CS4-0115-150917B04 Smooth(Mn,1x1)  
1668A-CS#4-015 H5-15-CS4-0115-150917B04 Smooth(Mn,1x1)  
1668A-CS#4-015 H5-15-CS4-011

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time  
Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Name: 5-150917B04, Date: 17-Sep-2015, Time: 17:25:46, ID: H5-15-CS4-011, Description: 1668A-CS#4-015, Vial: Tray1:8

PCB-123

5-150917B04 Smooth(Mn,1x1)

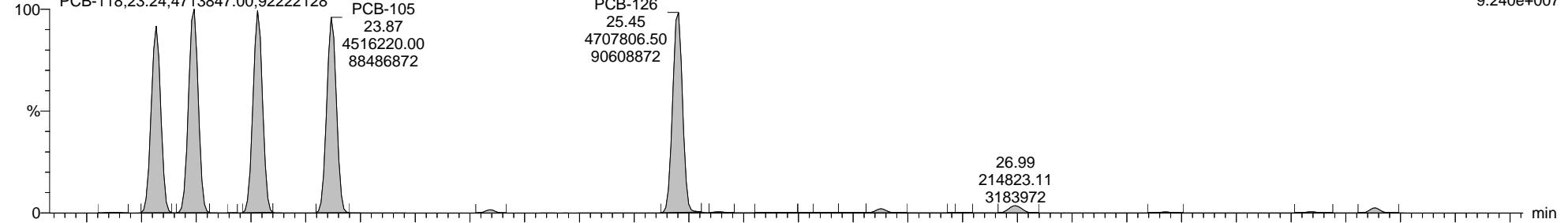
1668A-CS#4-015 H5-15-CS4-011

The figure is a line graph with a y-axis scale from 0 to 100. There are three prominent peaks plotted. The first peak is at a time corresponding to the label '23.24'. The second peak is at a time corresponding to the label '4713847.00'. The third peak is at a time corresponding to the label '92222128'. To the right of the graph, there is a vertical column of labels: 'PCB-105', '23.87', '4516220.00', and '88486872'. The x-axis labels are positioned above the peaks and to the left of the vertical column.

PCB-126  
25.45  
4707806.50  
90608872

26.99  
214823.11  
3183972

F5:Voltage SIR,El+  
325.8804  
9.240e+007



5-150917B04 Smooth(Mn,1x1)

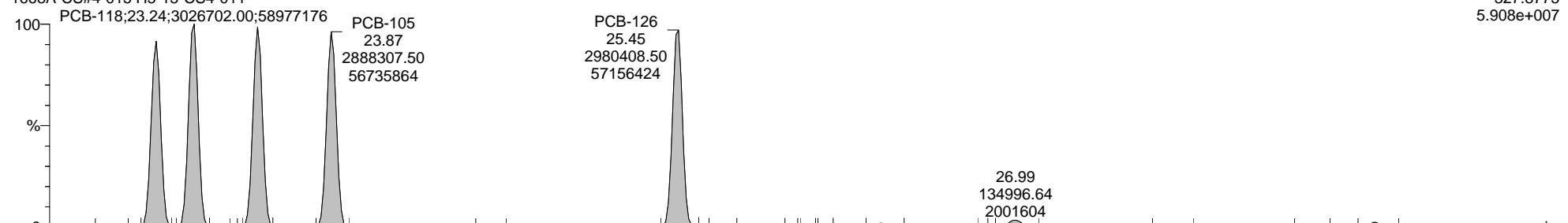
1668A-CS#4-015 H5-15-CS4-011

100 PCB-118;23.24;3026702.00;5897717

PCB-126  
25.45  
2980408.50  
57156424

26.99  
134996.64  
2001604

F5:Voltage SIR,El+  
327.8775  
5.908e+007



5-150917B04 Smooth(Mp 1x1)

3-150917 B04 Smooth(MH,1x1)  
1668A-CS#4-015 H5-15-CS4-011

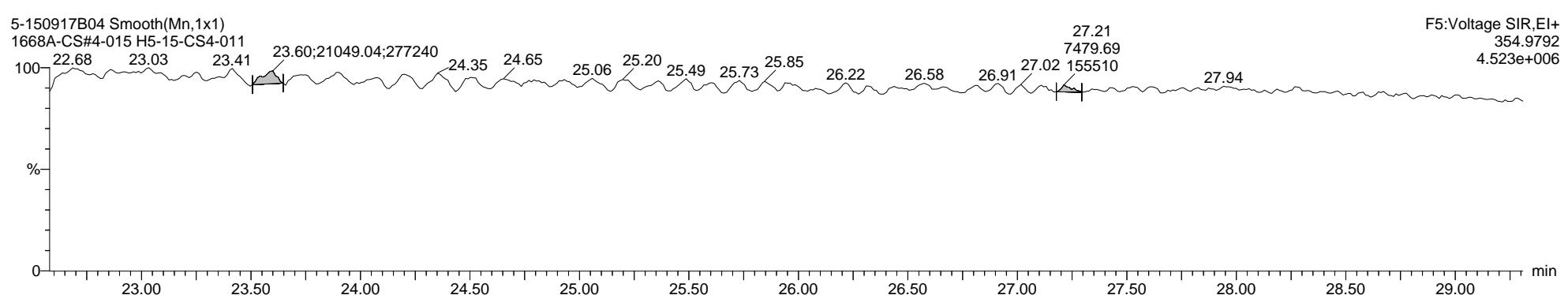
1008A-CS#-013115-15-CS+011 23.60;21049.04;277240  
22.68 23.03 23.41

25 20

25 85

236

F5:Voltage SIR,El+  
354.9792  
4.533e+006

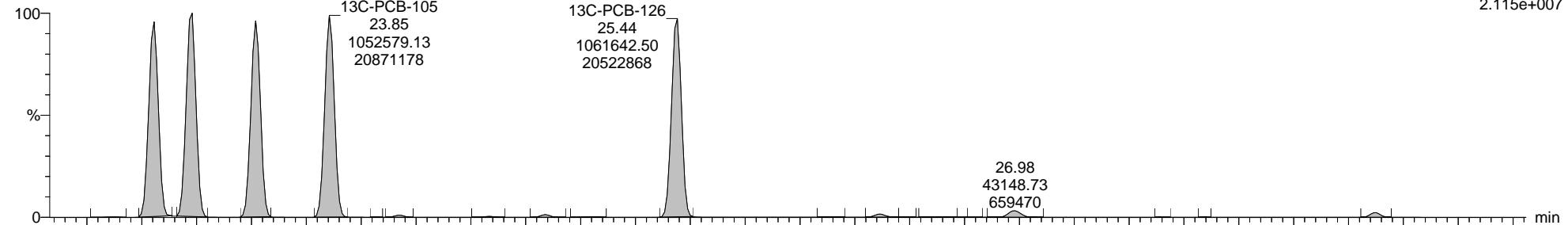
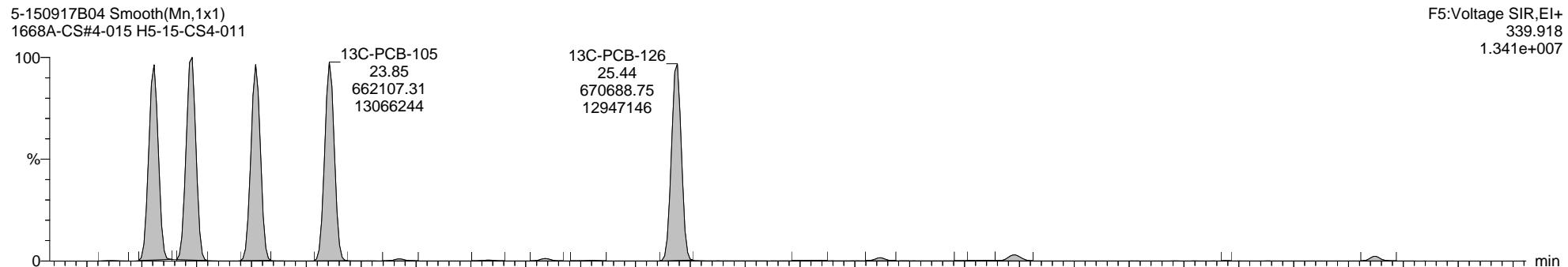
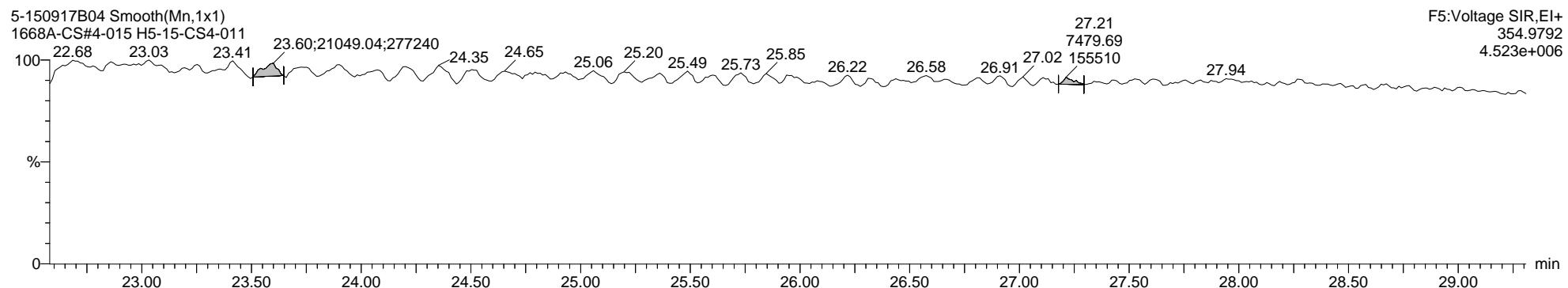


Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

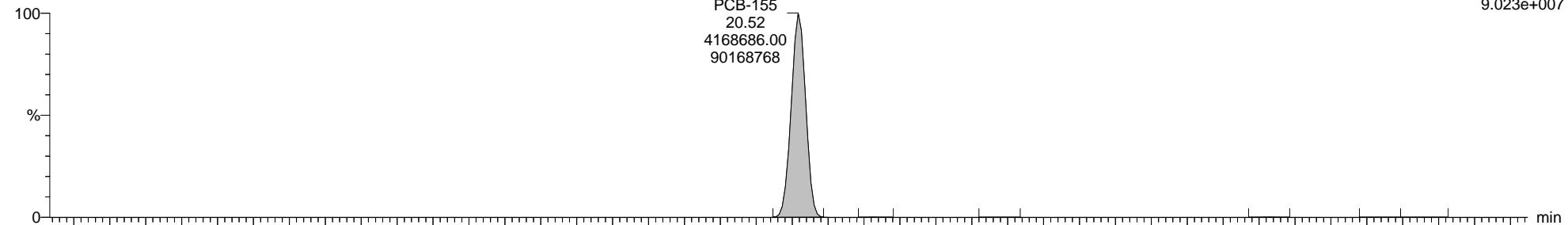
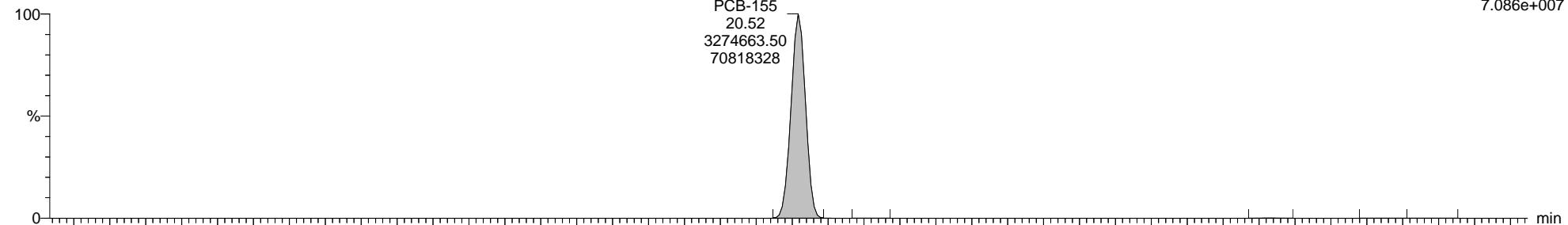
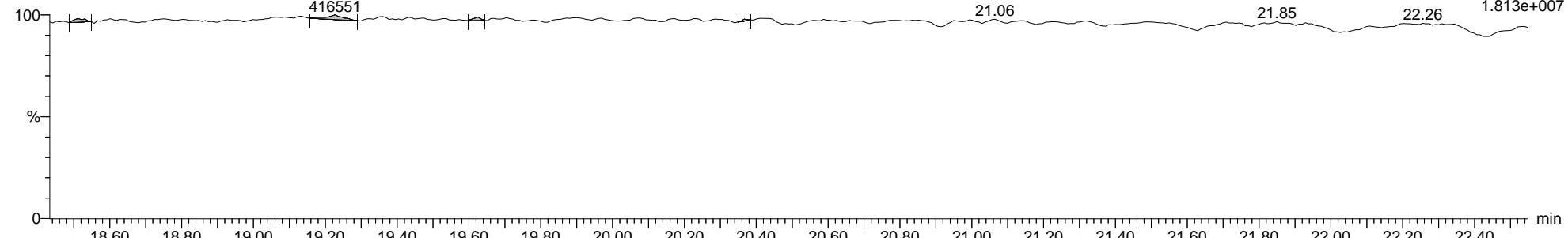
Name: 5-150917B04, Date: 17-Sep-2015, Time: 17:25:46, ID: H5-15-CS4-011, Description: 1668A-CS#4-015, Vial: Tray1:8

**13C-PCB-123**5-150917B04 Smooth(Mn,1x1)  
1668A-CS#4-015 H5-15-CS4-0115-150917B04 Smooth(Mn,1x1)  
1668A-CS#4-015 H5-15-CS4-0115-150917B04 Smooth(Mn,1x1)  
1668A-CS#4-015 H5-15-CS4-011

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

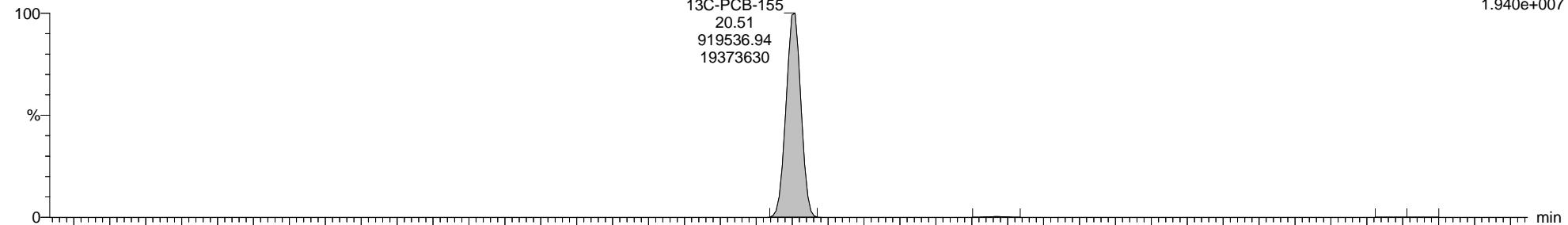
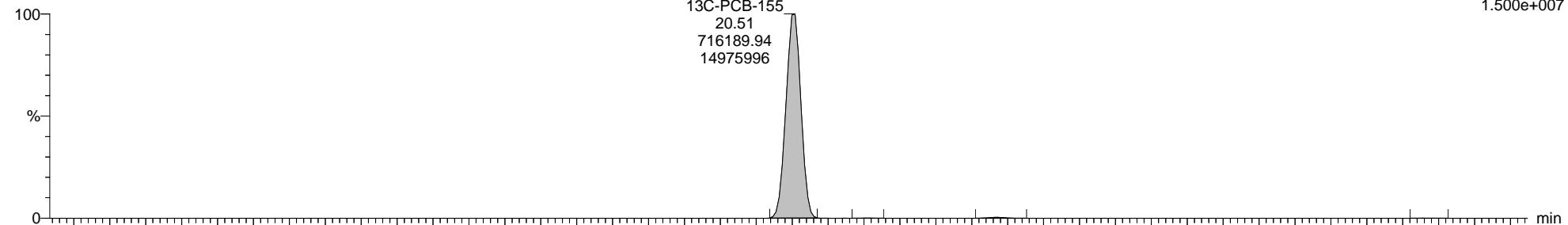
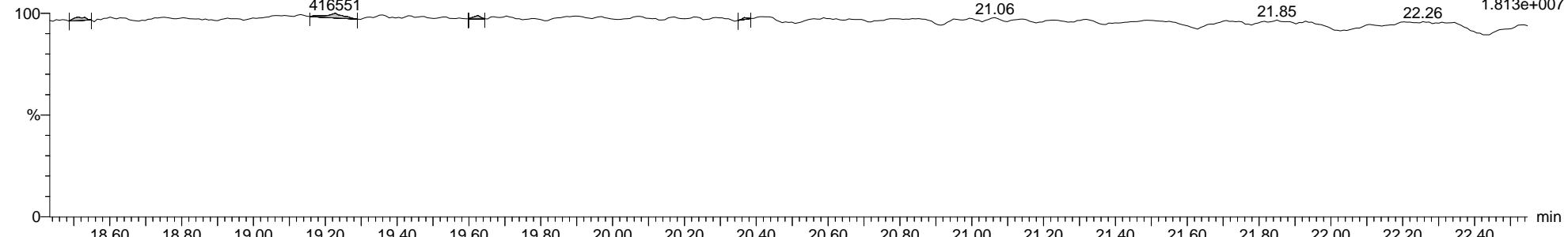
**Name: 5-150917B04, Date: 17-Sep-2015, Time: 17:25:46, ID: H5-15-CS4-011, Description: 1668A-CS#4-015, Vial: Tray1:8****PCB-155**5-150917B04 Smooth(Mn,1x1)  
1668A-CS#4-015 H5-15-CS4-0115-150917B04 Smooth(Mn,1x1)  
1668A-CS#4-015 H5-15-CS4-011F4:Voltage SIR,EI+  
361.8385  
7.086e+0075-150917B04 Smooth(Mn,1x1)  
1668A-CS#4-015 H5-15-CS4-011F4:Voltage SIR,EI+  
330.9792  
1.813e+007

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Name: 5-150917B04, Date: 17-Sep-2015, Time: 17:25:46, ID: H5-15-CS4-011, Description: 1668A-CS#4-015, Vial: Tray1:8

**13C-PCB-155**5-150917B04 Smooth(Mn,1x1)  
1668A-CS#4-015 H5-15-CS4-0115-150917B04 Smooth(Mn,1x1)  
1668A-CS#4-015 H5-15-CS4-011F4:Voltage SIR,EI+  
373.8789  
1.500e+0075-150917B04 Smooth(Mn,1x1)  
1668A-CS#4-015 H5-15-CS4-011F4:Voltage SIR,EI+  
330.9792  
1.813e+007

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

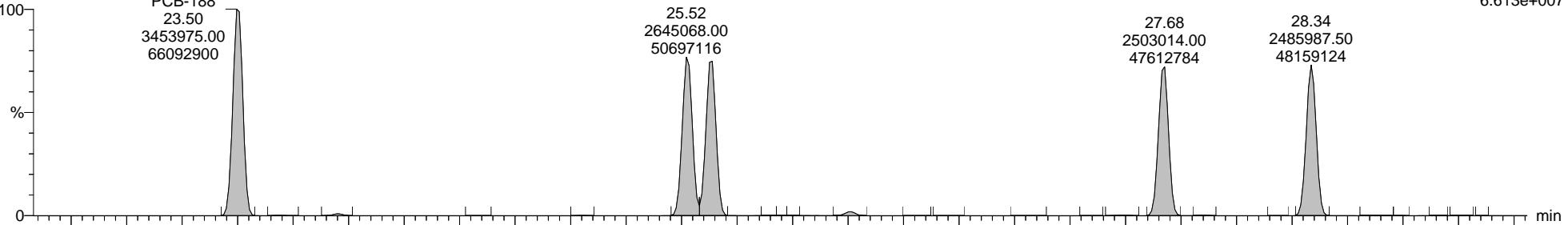
Name: 5-150917B04, Date: 17-Sep-2015, Time: 17:25:46, ID: H5-15-CS4-011, Description: 1668A-CS#4-015, Vial: Tray1:8

**PCB-188**

5-150917B04 Smooth(Mn,1x1)

1668A-CS#4-015 H5-15-CS4-011

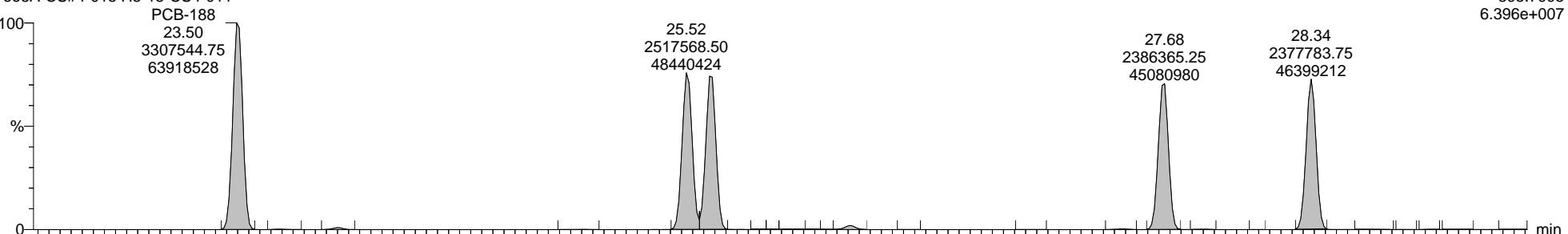
PCB-188



5-150917B04 Smooth(Mn,1x1)

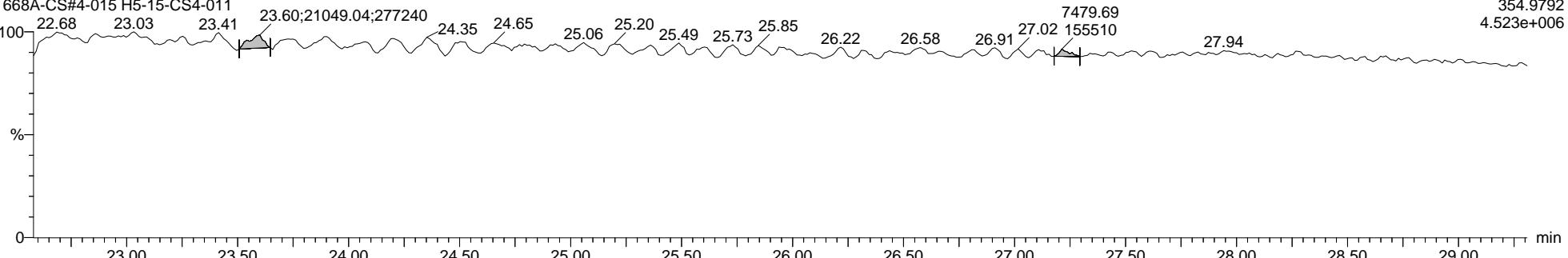
1668A-CS#4-015 H5-15-CS4-011

PCB-188



5-150917B04 Smooth(Mn,1x1)

1668A-CS#4-015 H5-15-CS4-011



Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

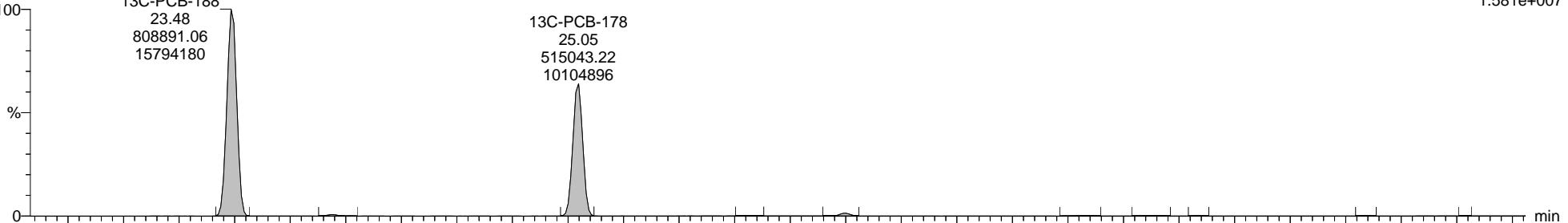
Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Name: 5-150917B04, Date: 17-Sep-2015, Time: 17:25:46, ID: H5-15-CS4-011, Description: 1668A-CS#4-015, Vial: Tray1:8

**13C-PCB-188**

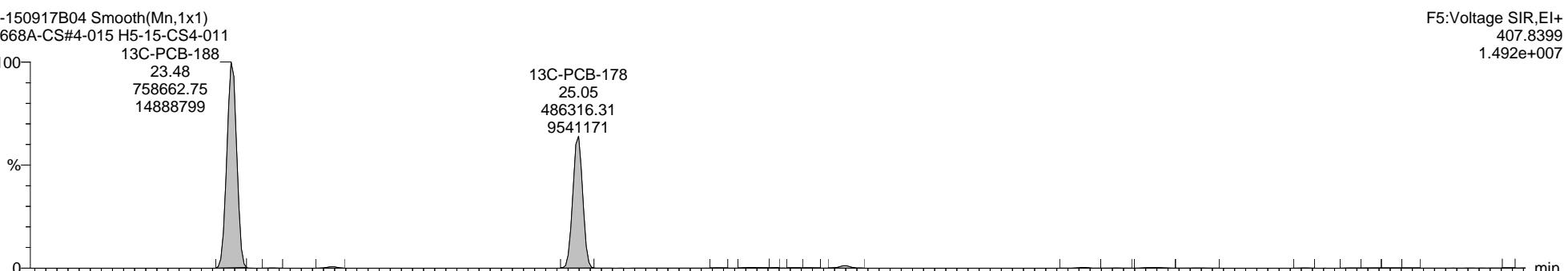
5-150917B04 Smooth(Mn,1x1)  
1668A-CS#4-015 H5-15-CS4-011  
13C-PCB-188  
23.48  
808891.06  
15794180

F5:Voltage SIR,EI+  
405.8428  
1.581e+007



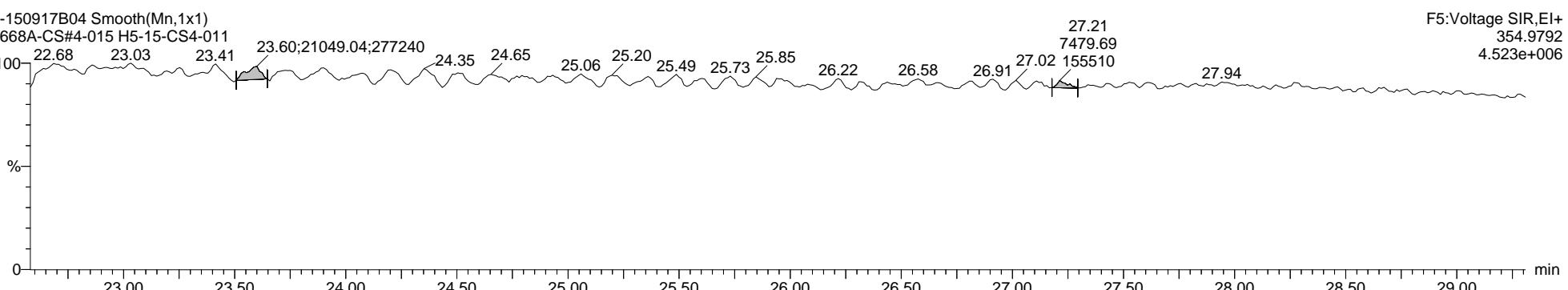
5-150917B04 Smooth(Mn,1x1)  
1668A-CS#4-015 H5-15-CS4-011  
13C-PCB-188  
23.48  
758662.75  
14888799

F5:Voltage SIR,EI+  
407.8399  
1.492e+007



5-150917B04 Smooth(Mn,1x1)  
1668A-CS#4-015 H5-15-CS4-011  
22.68 23.03 23.41 23.60;21049.04;277240 24.35 24.65 25.06 25.20 25.49 25.73 25.85 26.22 26.58 26.91 27.02 27.21 7479.69 155510 27.94

F5:Voltage SIR,EI+  
354.9792  
4.523e+006



Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Name: 5-150917B04, Date: 17-Sep-2015, Time: 17:25:46, ID: H5-15-CS4-011, Description: 1668A-CS#4-015, Vial: Tray1:8

**PCB-189**

5-150917B04 Smooth(Mn,1x1)

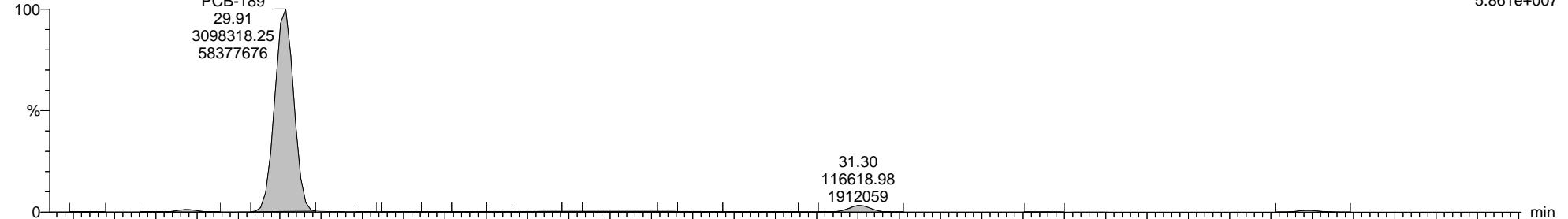
1668A-CS#4-015 H5-15-CS4-011

PCB-189  
29.91  
3098318.25  
58377676

F6:Voltage SIR,EI+

393.8025

5.861e+007



5-150917B04 Smooth(Mn,1x1)

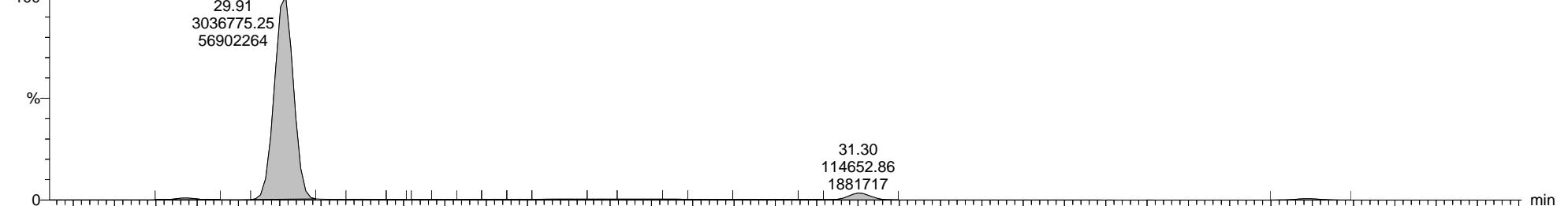
1668A-CS#4-015 H5-15-CS4-011

PCB-189  
29.91  
3036775.25  
56902264

F6:Voltage SIR,EI+

395.7995

5.713e+007



5-150917B04 Smooth(Mn,1x1)

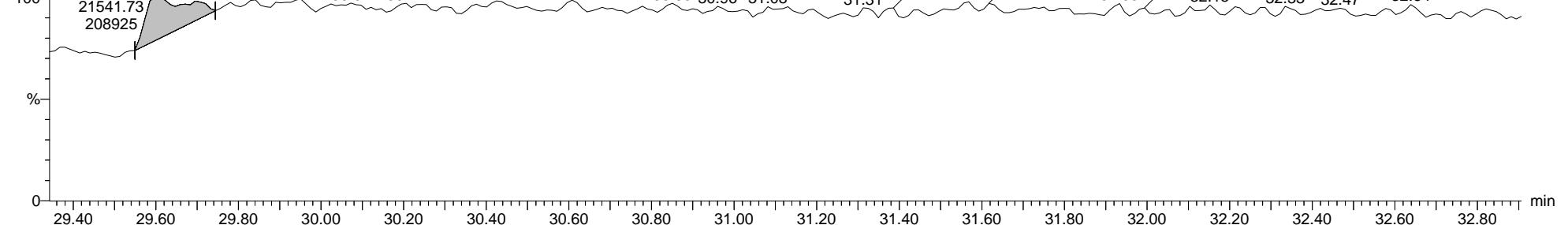
1668A-CS#4-015 H5-15-CS4-011

29.60  
21541.73  
208925

F6:Voltage SIR,EI+

454.9728

9.871e+005

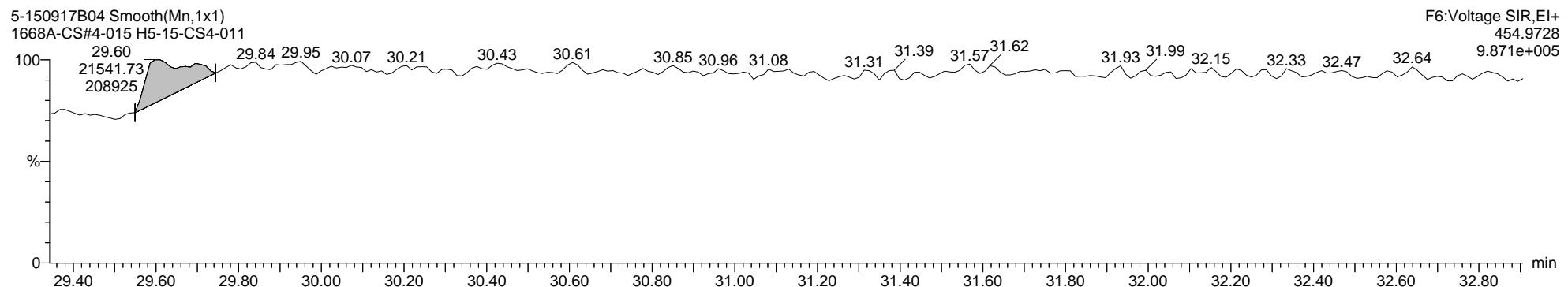
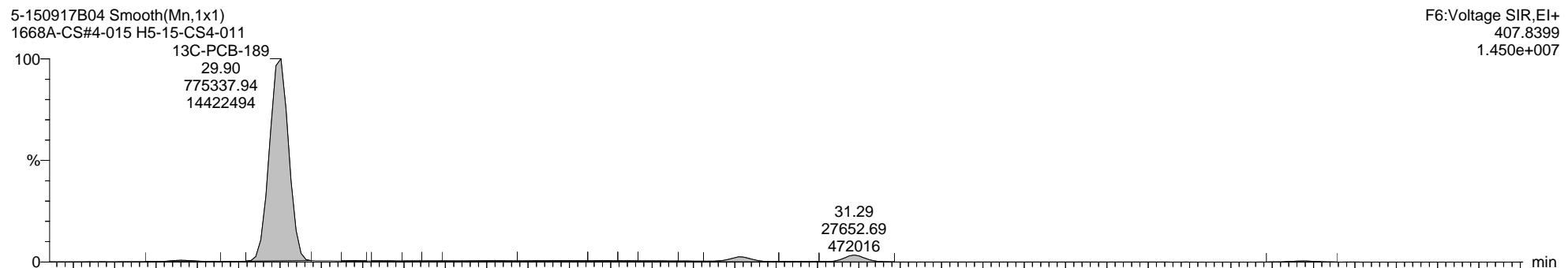
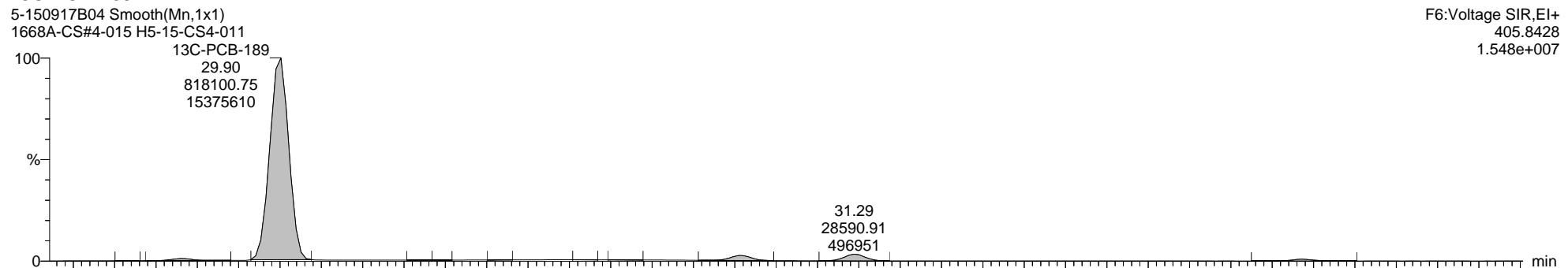


Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Name: 5-150917B04, Date: 17-Sep-2015, Time: 17:25:46, ID: H5-15-CS4-011, Description: 1668A-CS#4-015, Vial: Tray1:8

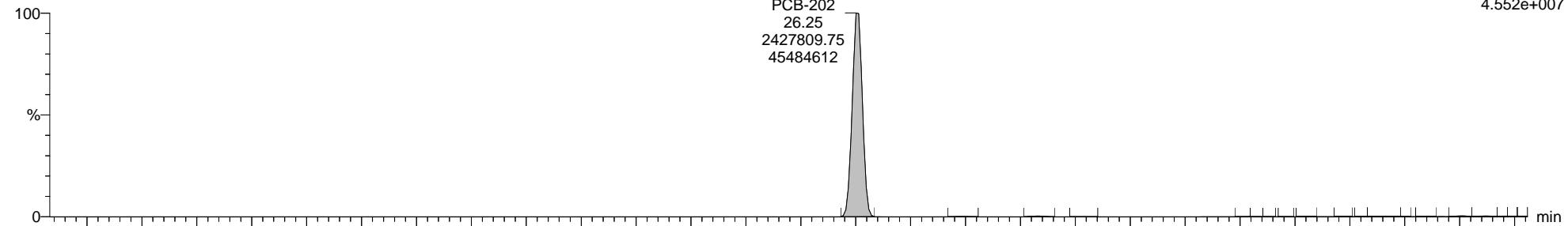
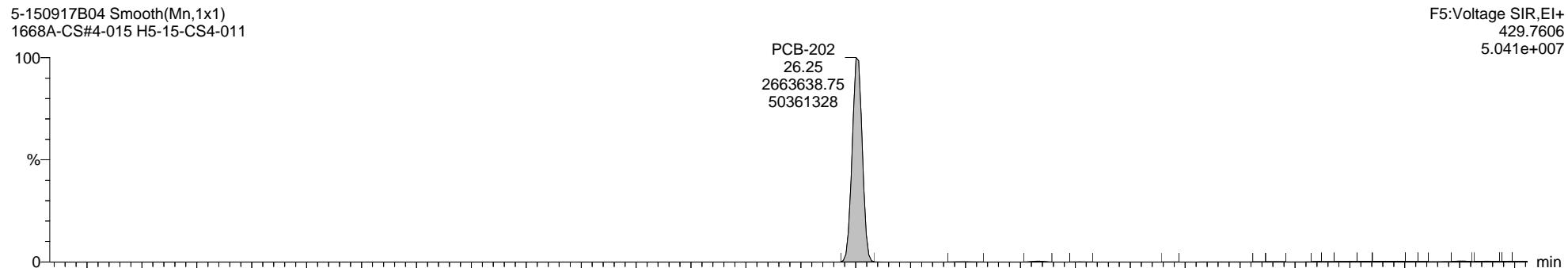
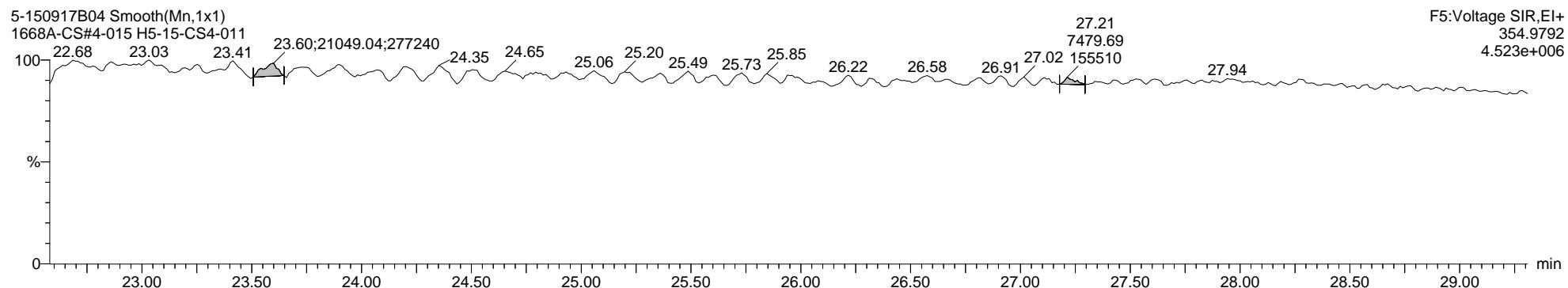
**13C-PCB-189**

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

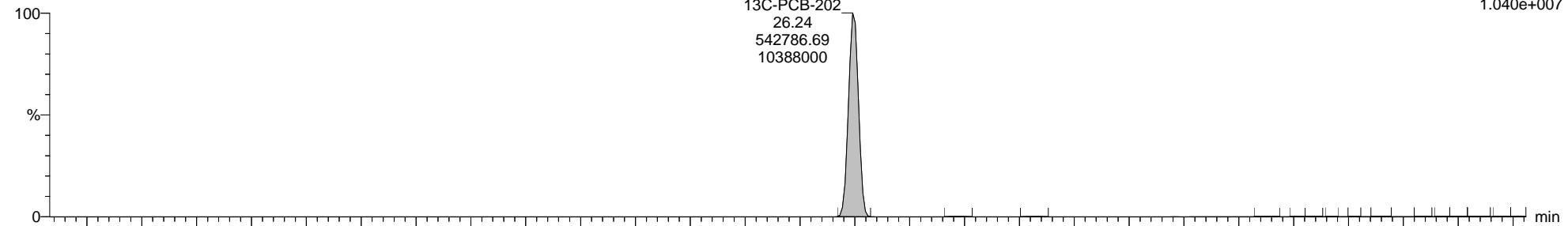
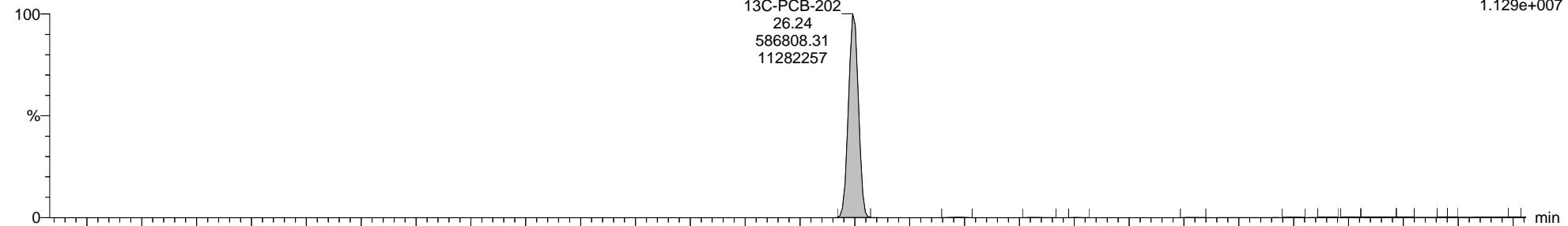
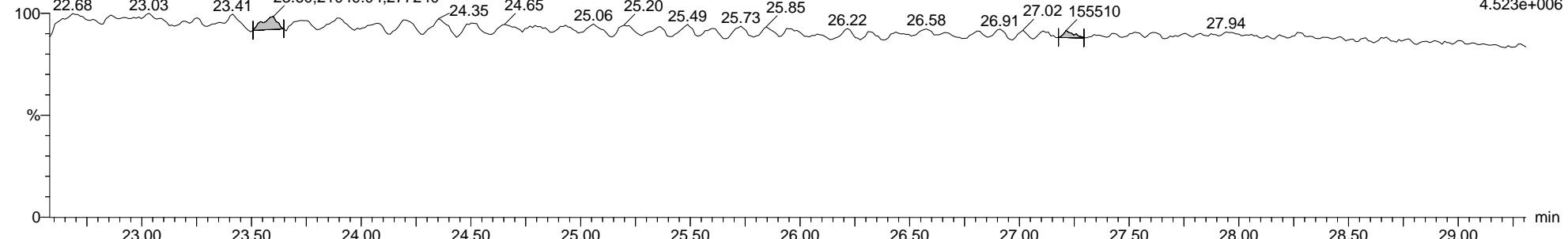
Name: 5-150917B04, Date: 17-Sep-2015, Time: 17:25:46, ID: H5-15-CS4-011, Description: 1668A-CS#4-015, Vial: Tray1:8

**PCB-202**5-150917B04 Smooth(Mn,1x1)  
1668A-CS#4-015 H5-15-CS4-0115-150917B04 Smooth(Mn,1x1)  
1668A-CS#4-015 H5-15-CS4-0115-150917B04 Smooth(Mn,1x1)  
1668A-CS#4-015 H5-15-CS4-011

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

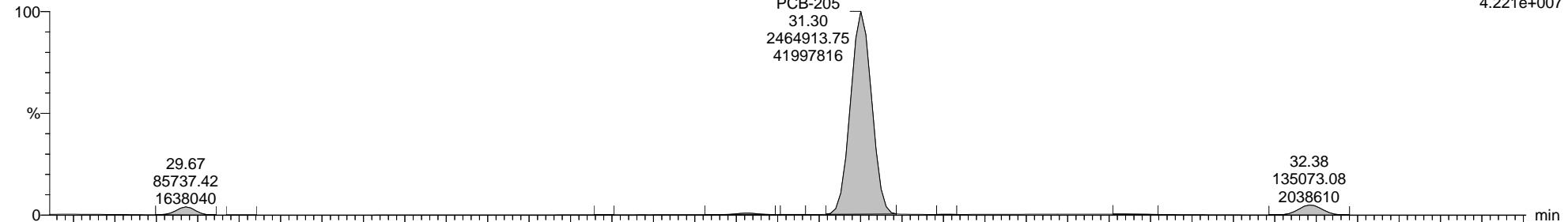
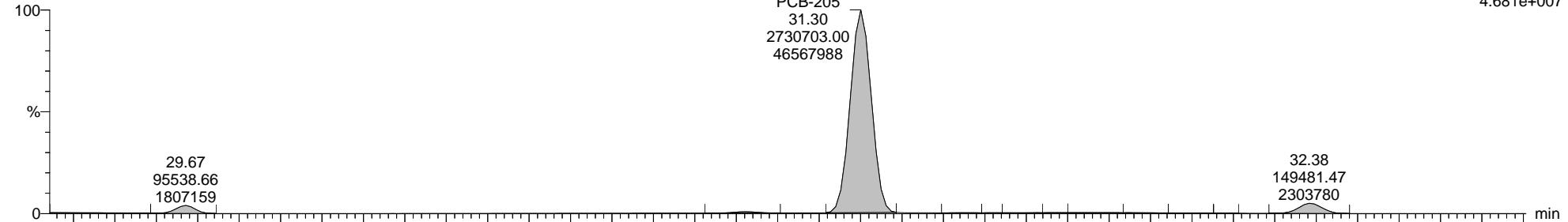
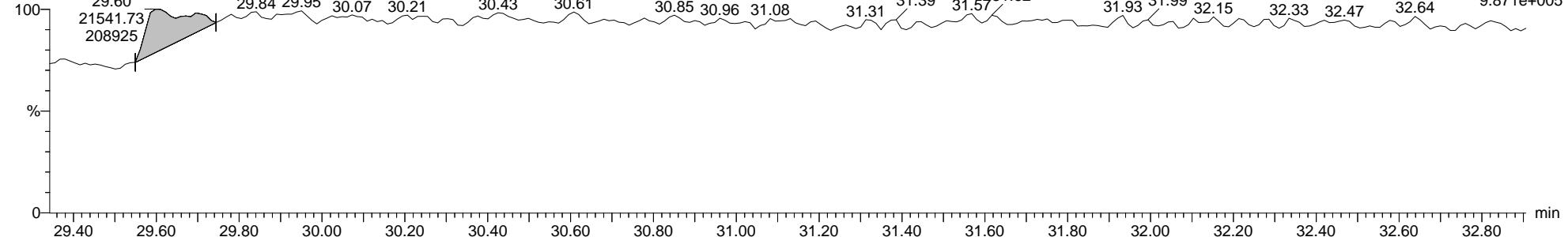
**Name: 5-150917B04, Date: 17-Sep-2015, Time: 17:25:46, ID: H5-15-CS4-011, Description: 1668A-CS#4-015, Vial: Tray1:8****13C-PCB-202**5-150917B04 Smooth(Mn,1x1)  
1668A-CS#4-015 H5-15-CS4-0115-150917B04 Smooth(Mn,1x1)  
1668A-CS#4-015 H5-15-CS4-011F5:Voltage SIR,EI+  
441.8008  
1.129e+0075-150917B04 Smooth(Mn,1x1)  
1668A-CS#4-015 H5-15-CS4-011F5:Voltage SIR,EI+  
354.9792  
4.523e+006

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Name: 5-150917B04, Date: 17-Sep-2015, Time: 17:25:46, ID: H5-15-CS4-011, Description: 1668A-CS#4-015, Vial: Tray1:8

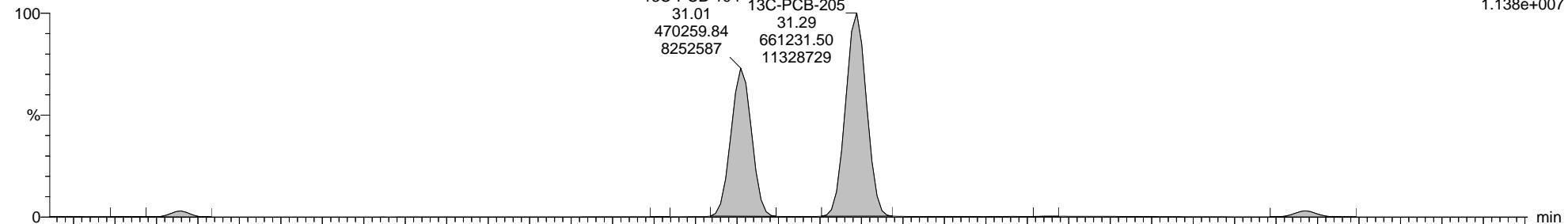
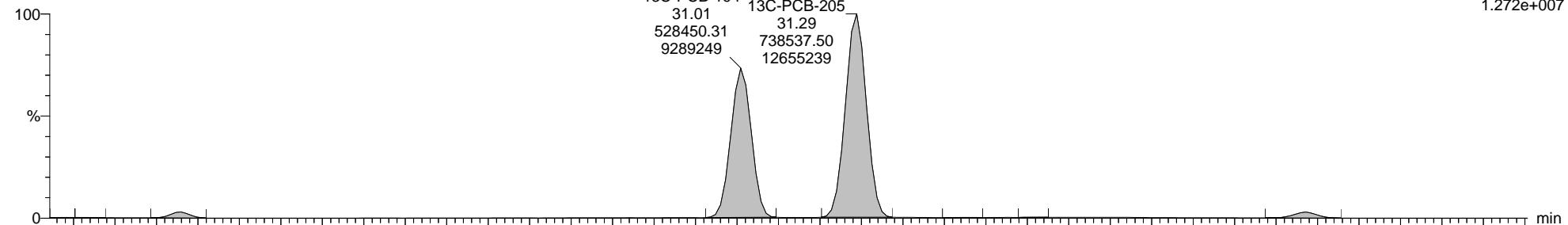
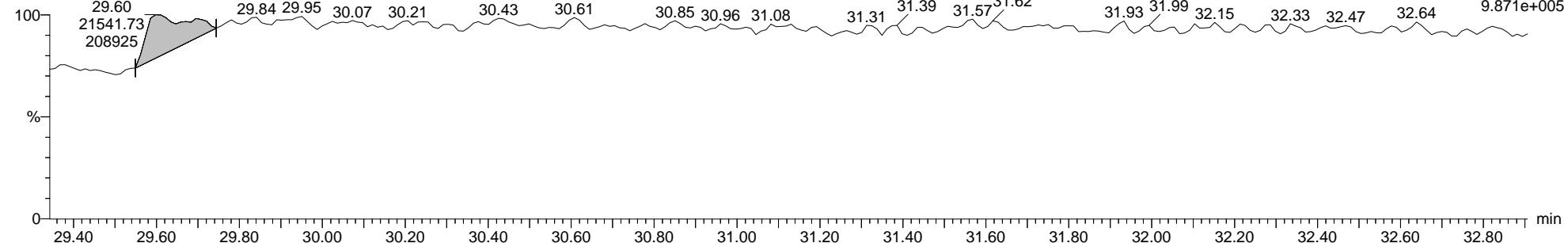
**PCB-205**5-150917B04 Smooth(Mn,1x1)  
1668A-CS#4-015 H5-15-CS4-011F6:Voltage SIR, EI+  
427.7635  
4.221e+0075-150917B04 Smooth(Mn,1x1)  
1668A-CS#4-015 H5-15-CS4-011F6:Voltage SIR, EI+  
429.7606  
4.681e+0075-150917B04 Smooth(Mn,1x1)  
1668A-CS#4-015 H5-15-CS4-011F6:Voltage SIR, EI+  
454.9728  
9.871e+005

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Name: 5-150917B04, Date: 17-Sep-2015, Time: 17:25:46, ID: H5-15-CS4-011, Description: 1668A-CS#4-015, Vial: Tray1:8

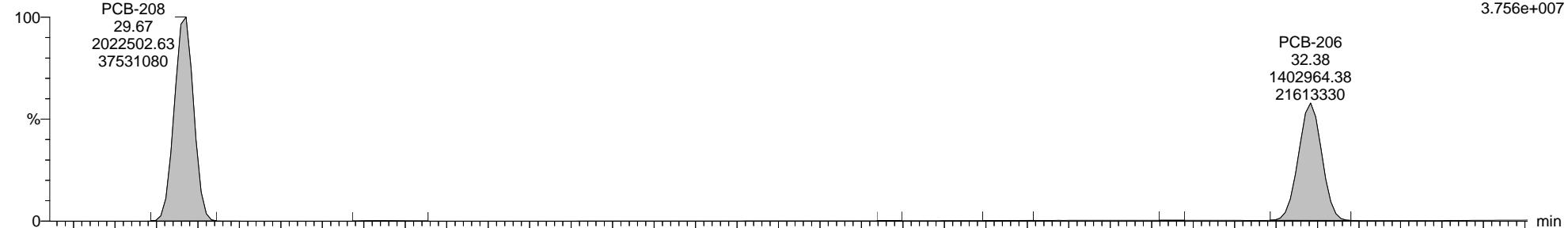
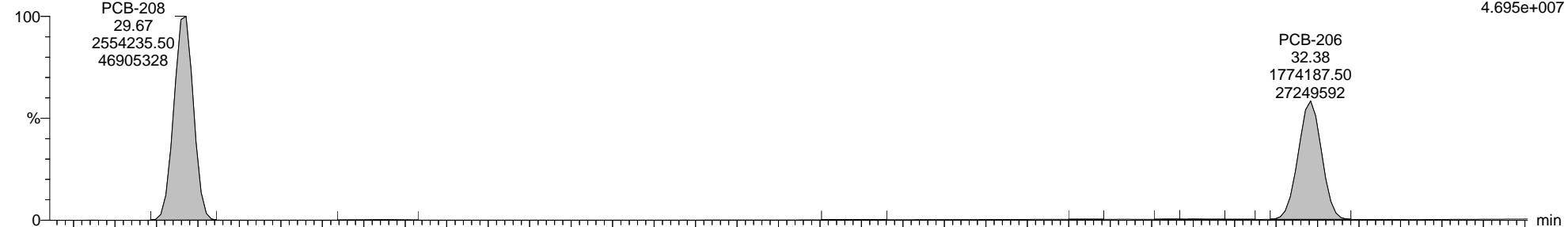
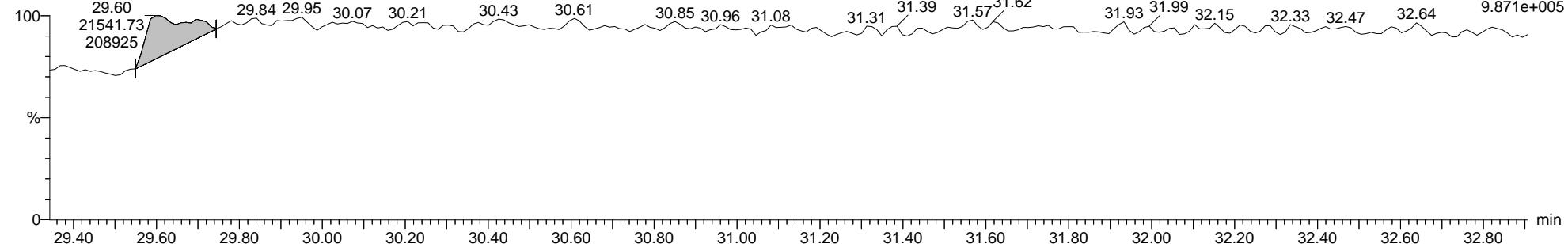
**13C-PCB-205**5-150917B04 Smooth(Mn,1x1)  
1668A-CS#4-015 H5-15-CS4-0115-150917B04 Smooth(Mn,1x1)  
1668A-CS#4-015 H5-15-CS4-0115-150917B04 Smooth(Mn,1x1)  
1668A-CS#4-015 H5-15-CS4-011

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Name: 5-150917B04, Date: 17-Sep-2015, Time: 17:25:46, ID: H5-15-CS4-011, Description: 1668A-CS#4-015, Vial: Tray1:8

**PCB-208**5-150917B04 Smooth(Mn,1x1)  
1668A-CS#4-015 H5-15-CS4-0115-150917B04 Smooth(Mn,1x1)  
1668A-CS#4-015 H5-15-CS4-0115-150917B04 Smooth(Mn,1x1)  
1668A-CS#4-015 H5-15-CS4-011

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

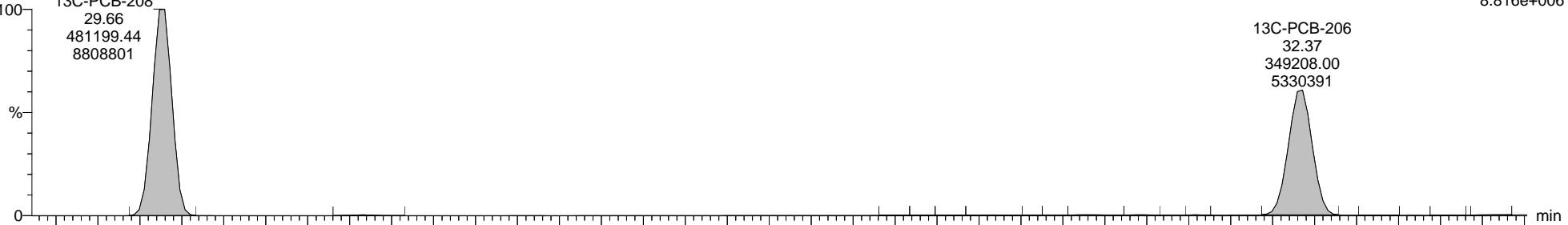
Name: 5-150917B04, Date: 17-Sep-2015, Time: 17:25:46, ID: H5-15-CS4-011, Description: 1668A-CS#4-015, Vial: Tray1:8

**13C-PCB-208**

5-150917B04 Smooth(Mn,1x1)

1668A-CS#4-015 H5-15-CS4-011

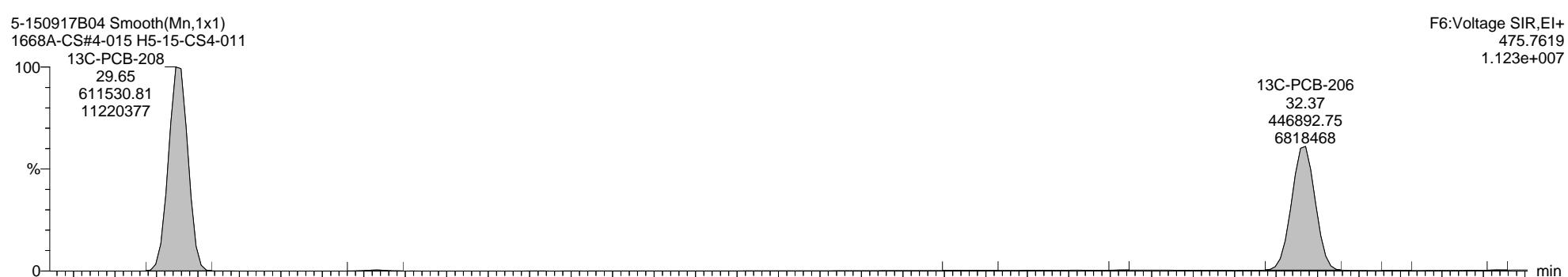
13C-PCB-208

29.66  
481199.44  
880880113C-PCB-206  
32.37  
349208.00  
5330391

5-150917B04 Smooth(Mn,1x1)

1668A-CS#4-015 H5-15-CS4-011

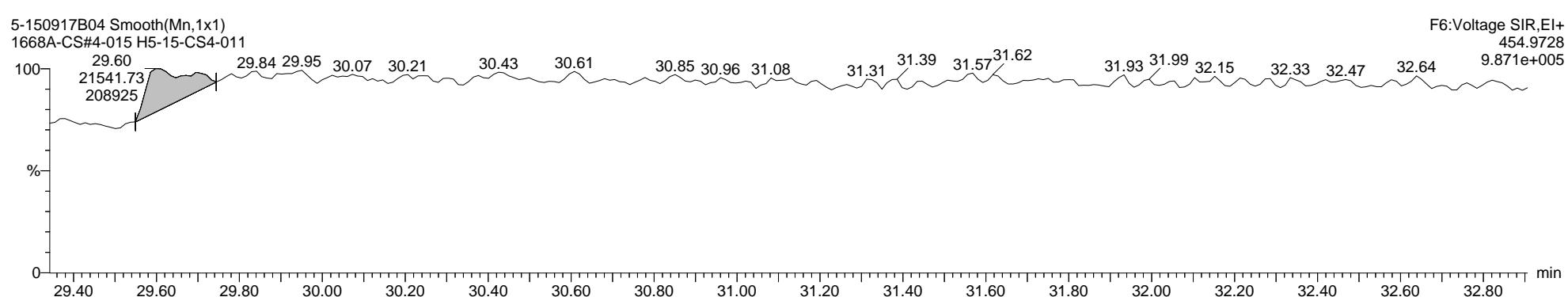
13C-PCB-208

29.65  
611530.81  
1122037713C-PCB-206  
32.37  
446892.75  
6818468

5-150917B04 Smooth(Mn,1x1)

1668A-CS#4-015 H5-15-CS4-011

13C-PCB-208

29.60  
21541.73  
208925

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

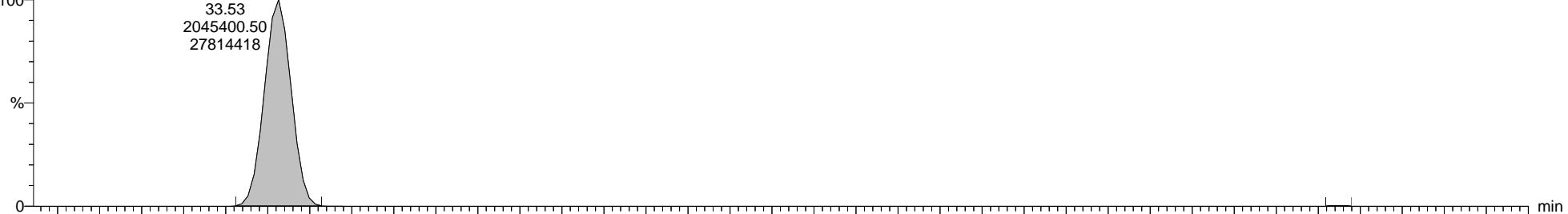
Name: 5-150917B04, Date: 17-Sep-2015, Time: 17:25:46, ID: H5-15-CS4-011, Description: 1668A-CS#4-015, Vial: Tray1:8

### PCB-209

5-150917B04 Smooth(Mn,1x1)

1668A-CS#4-015 H5-15-CS4-011

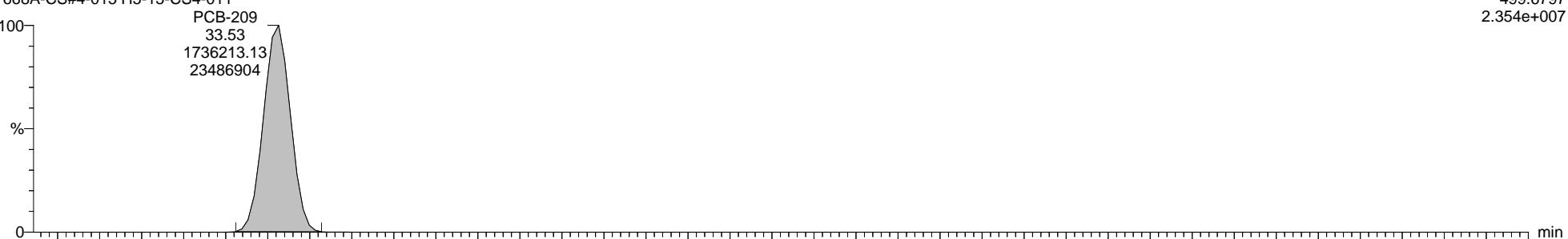
PCB-209



5-150917B04 Smooth(Mn,1x1)

1668A-CS#4-015 H5-15-CS4-011

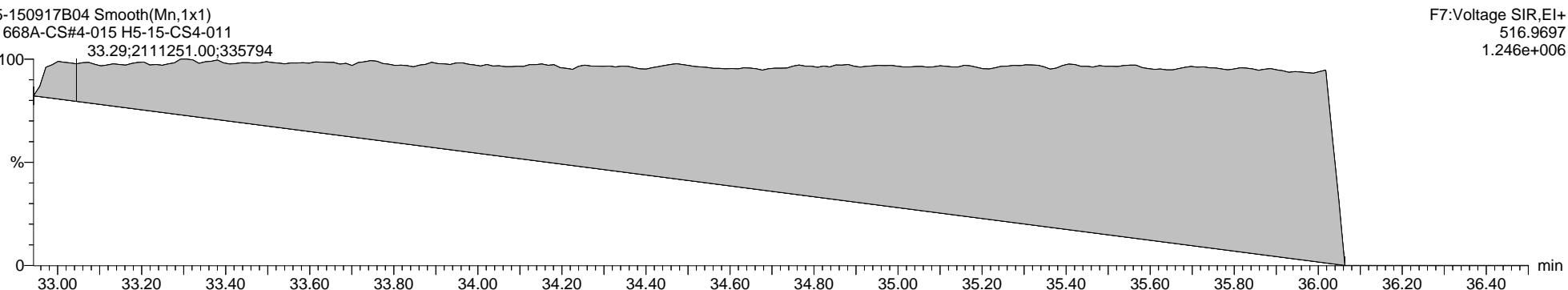
PCB-209



5-150917B04 Smooth(Mn,1x1)

1668A-CS#4-015 H5-15-CS4-011

33.29;2111251.00;335794



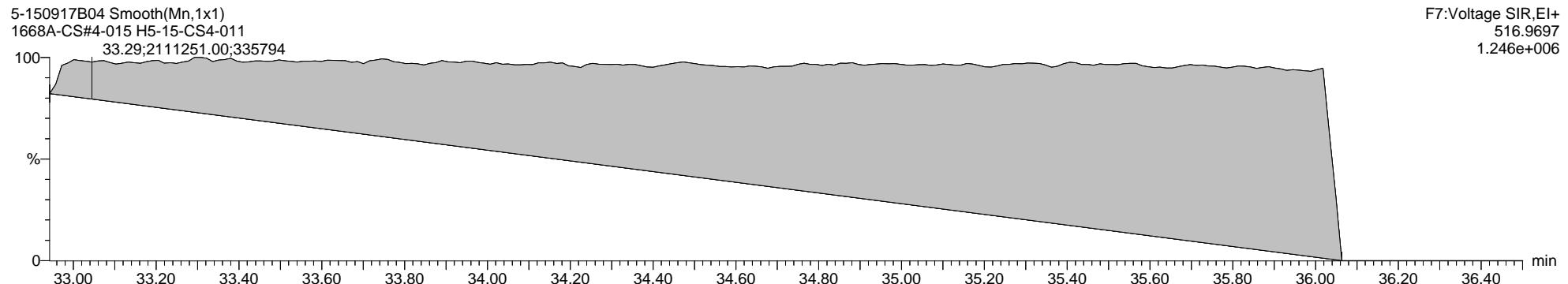
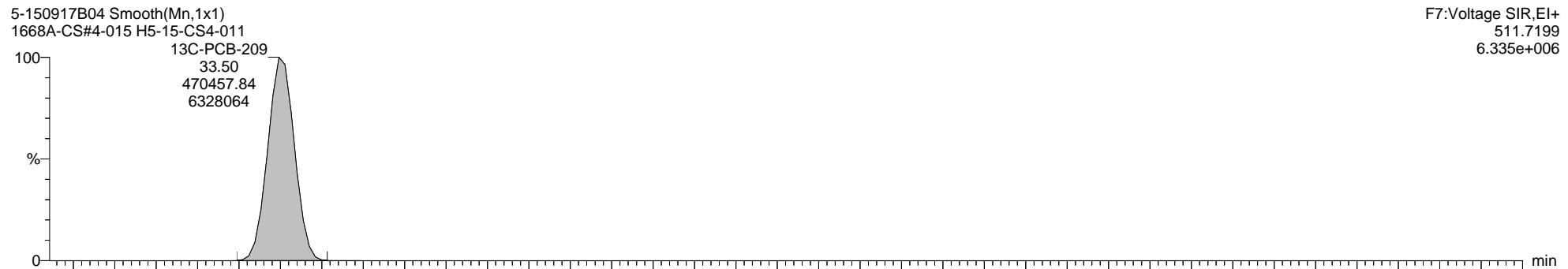
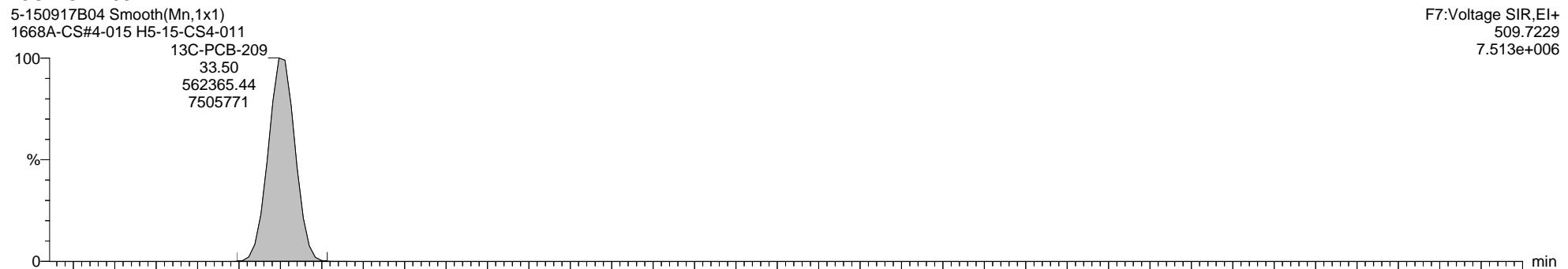
Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Name: 5-150917B04, Date: 17-Sep-2015, Time: 17:25:46, ID: H5-15-CS4-011, Description: 1668A-CS#4-015, Vial: Tray1:8

### 13C-PCB-209

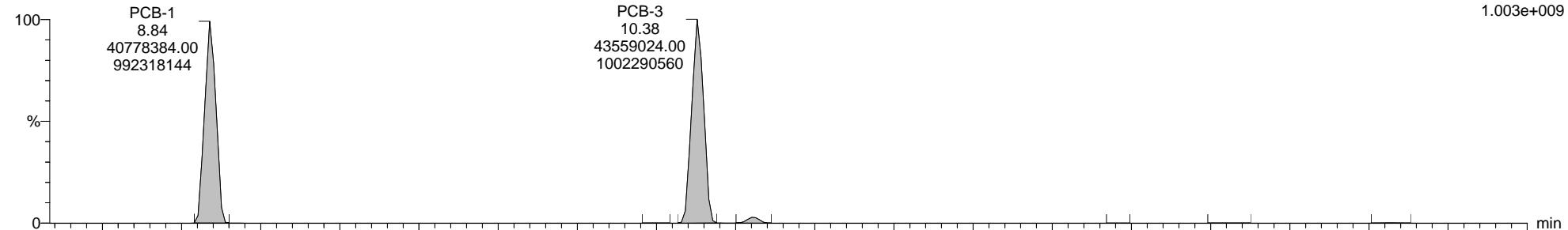
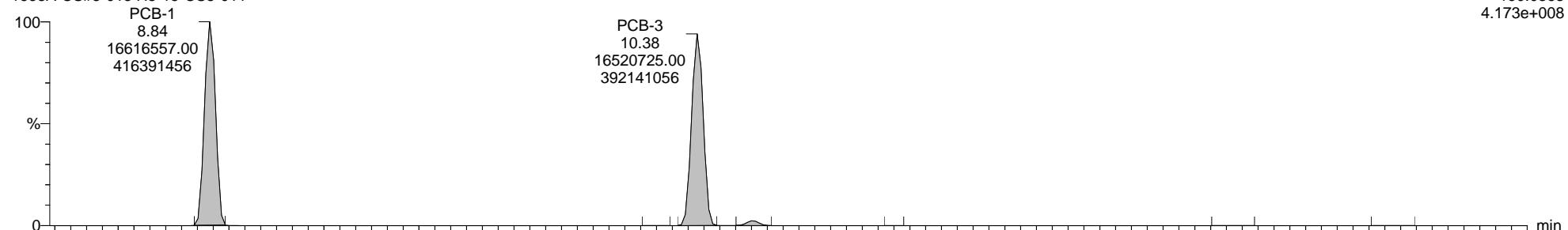
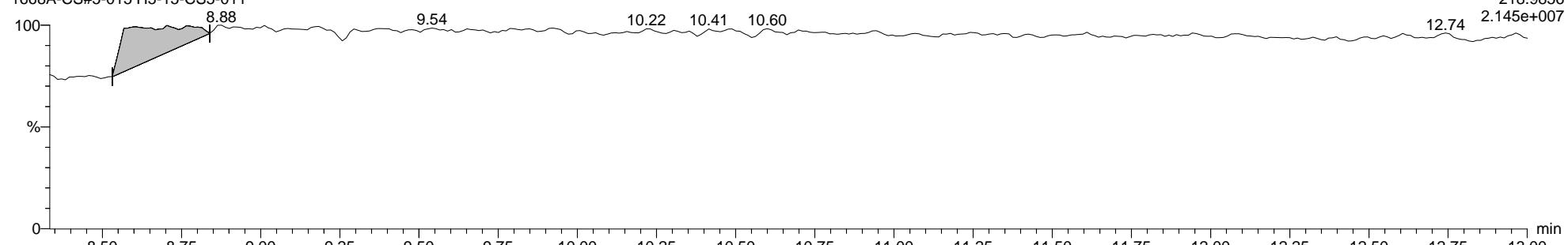


Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Name: 5-150917B03, Date: 17-Sep-2015, Time: 16:46:19, ID: H5-15-CS5-011, Description: 1668A-CS#5-015, Vial: Tray1:7

**PCB-1**5-150917B03 Smooth(Mn,1x1)  
1668A-CS#5-015 H5-15-CS5-0115-150917B03 Smooth(Mn,1x1)  
1668A-CS#5-015 H5-15-CS5-0115-150917B03 Smooth(Mn,1x1)  
1668A-CS#5-015 H5-15-CS5-011

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

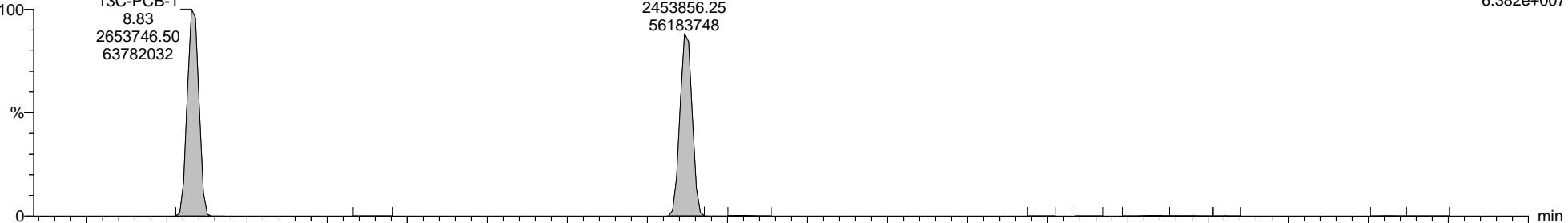
Name: 5-150917B03, Date: 17-Sep-2015, Time: 16:46:19, ID: H5-15-CS5-011, Description: 1668A-CS#5-015, Vial: Tray1:7

**13C-PCB-1**

5-150917B03 Smooth(Mn,1x1)

1668A-CS#5-015 H5-15-CS5-011

13C-PCB-1

8.83  
2653746.50  
63782032

13C-PCB-3

10.37

2453856.25

56183748

F1:Voltage SIR,EI+

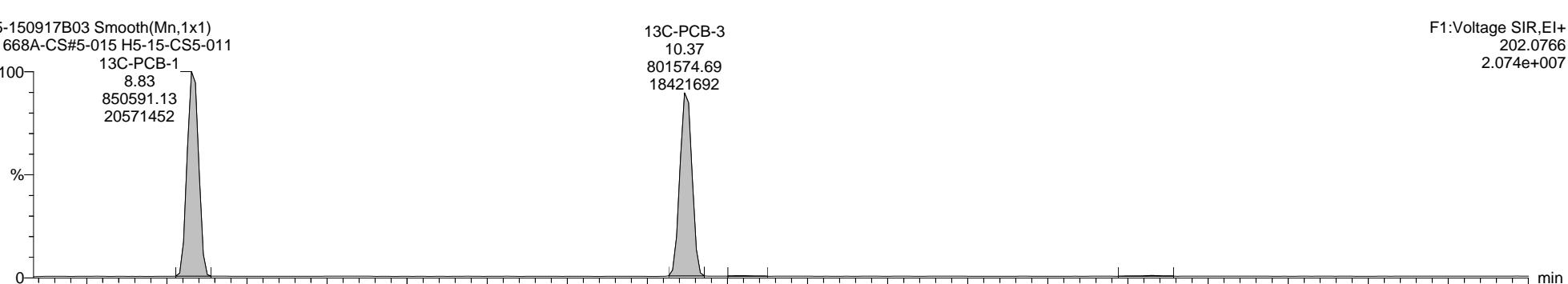
200.0795

6.382e+007

5-150917B03 Smooth(Mn,1x1)

1668A-CS#5-015 H5-15-CS5-011

13C-PCB-1

8.83  
850591.13  
20571452

13C-PCB-3

10.37

801574.69

18421692

F1:Voltage SIR,EI+

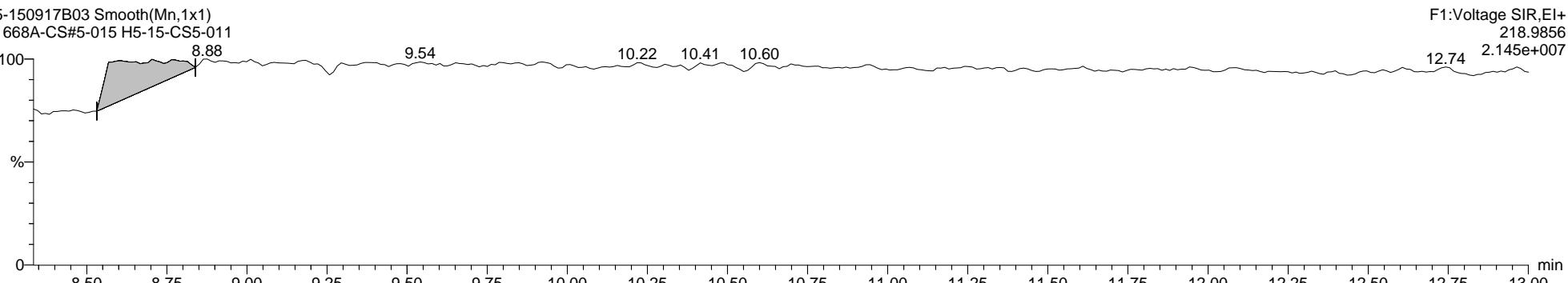
202.0766

2.074e+007

5-150917B03 Smooth(Mn,1x1)

1668A-CS#5-015 H5-15-CS5-011

13C-PCB-1

8.88  
9.54  
10.22  
10.41  
10.60  
12.74

F1:Voltage SIR,EI+

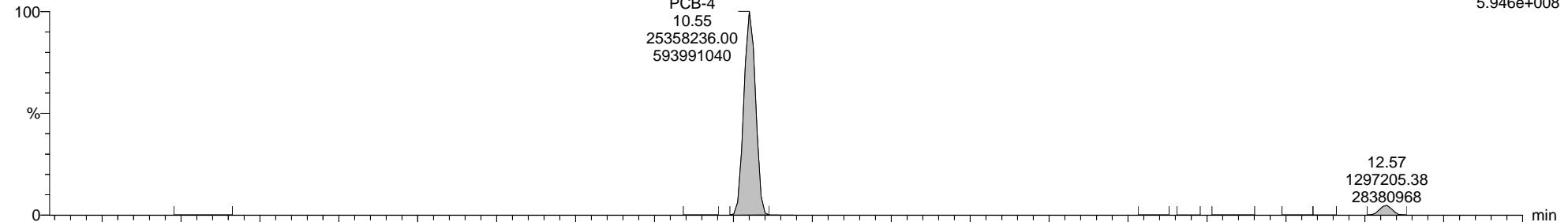
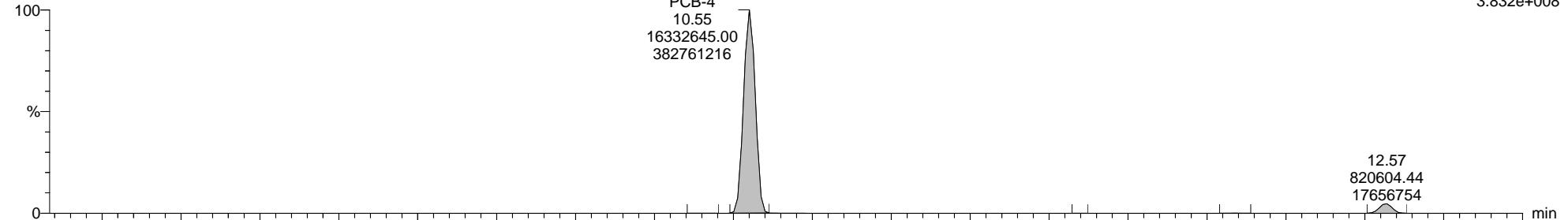
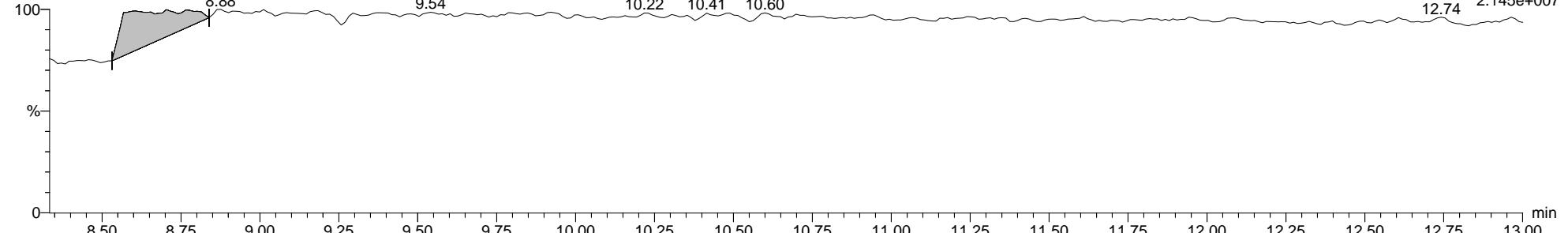
218.9856

2.145e+007

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

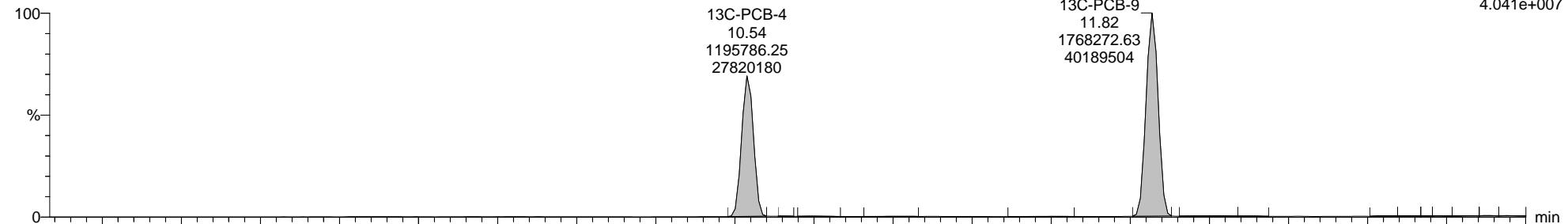
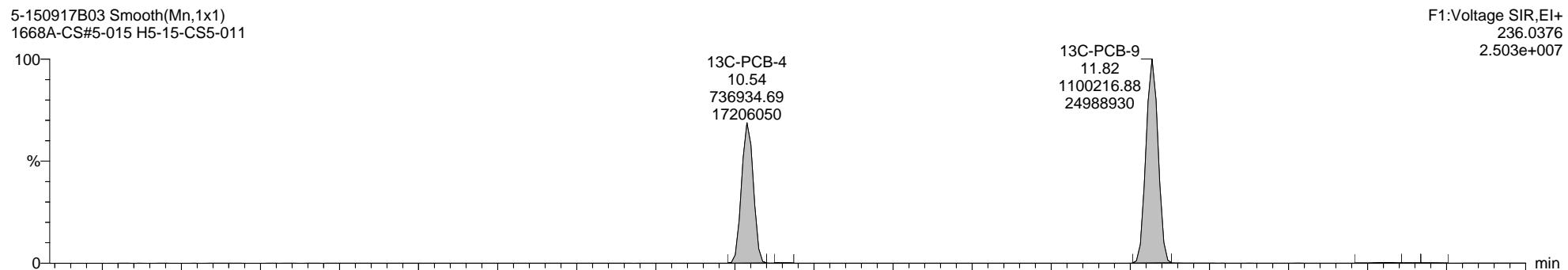
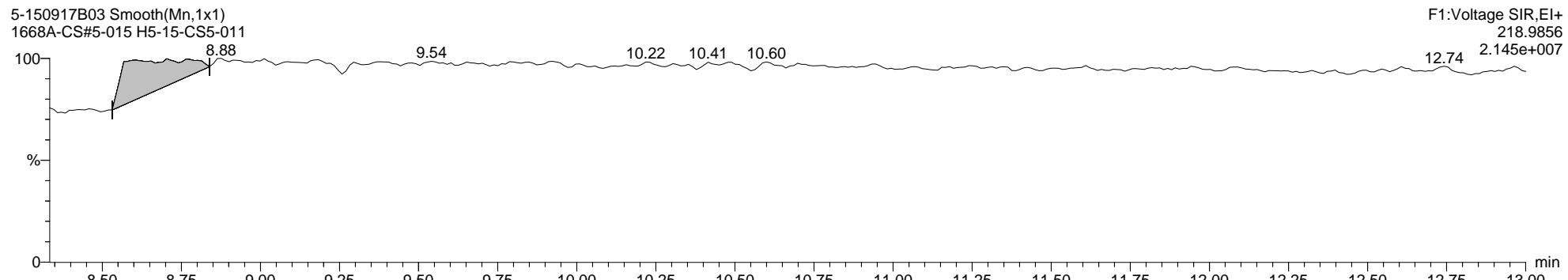
Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

**Name: 5-150917B03, Date: 17-Sep-2015, Time: 16:46:19, ID: H5-15-CS5-011, Description: 1668A-CS#5-015, Vial: Tray1:7****PCB-4**5-150917B03 Smooth(Mn,1x1)  
1668A-CS#5-015 H5-15-CS5-011F1:Voltage SIR,EI+  
222.0003  
5.946e+0085-150917B03 Smooth(Mn,1x1)  
1668A-CS#5-015 H5-15-CS5-011F1:Voltage SIR,EI+  
223.9974  
3.832e+0085-150917B03 Smooth(Mn,1x1)  
1668A-CS#5-015 H5-15-CS5-011F1:Voltage SIR,EI+  
218.9856  
2.145e+007

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

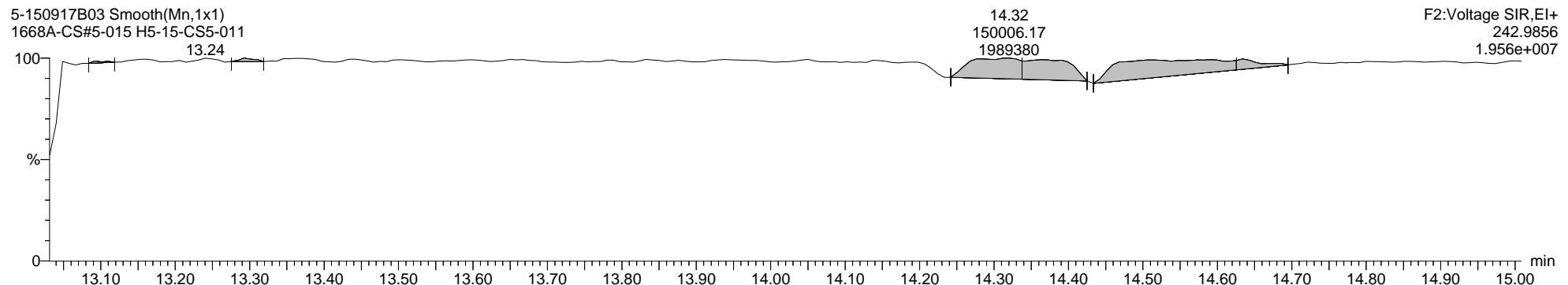
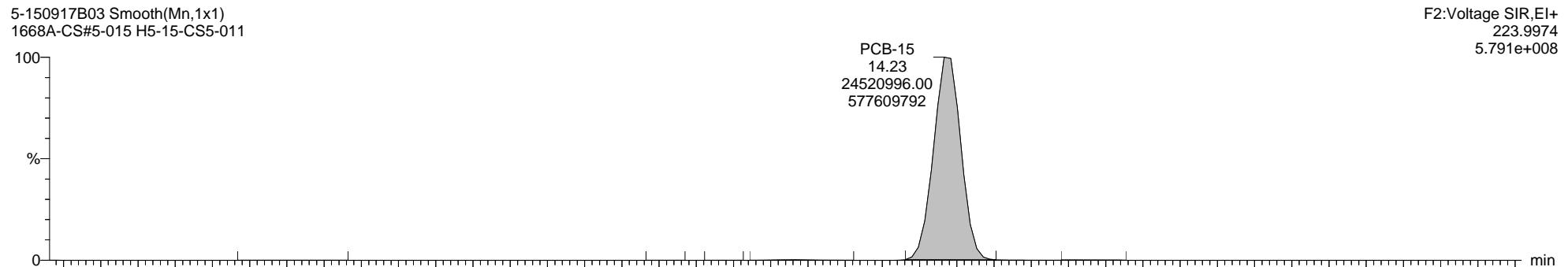
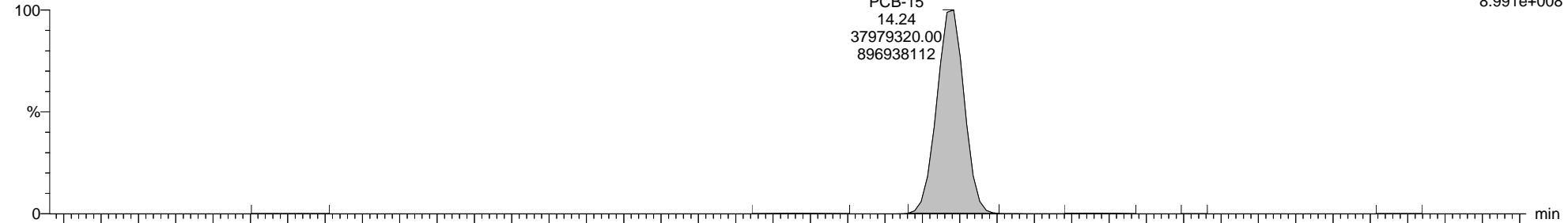
**Name: 5-150917B03, Date: 17-Sep-2015, Time: 16:46:19, ID: H5-15-CS5-011, Description: 1668A-CS#5-015, Vial: Tray1:7****13C-PCB-4**5-150917B03 Smooth(Mn,1x1)  
1668A-CS#5-015 H5-15-CS5-0115-150917B03 Smooth(Mn,1x1)  
1668A-CS#5-015 H5-15-CS5-0115-150917B03 Smooth(Mn,1x1)  
1668A-CS#5-015 H5-15-CS5-011

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Name: 5-150917B03, Date: 17-Sep-2015, Time: 16:46:19, ID: H5-15-CS5-011, Description: 1668A-CS#5-015, Vial: Tray1:7

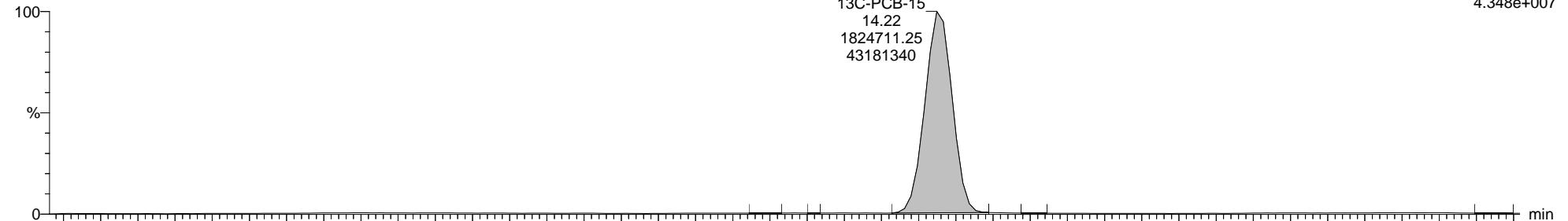
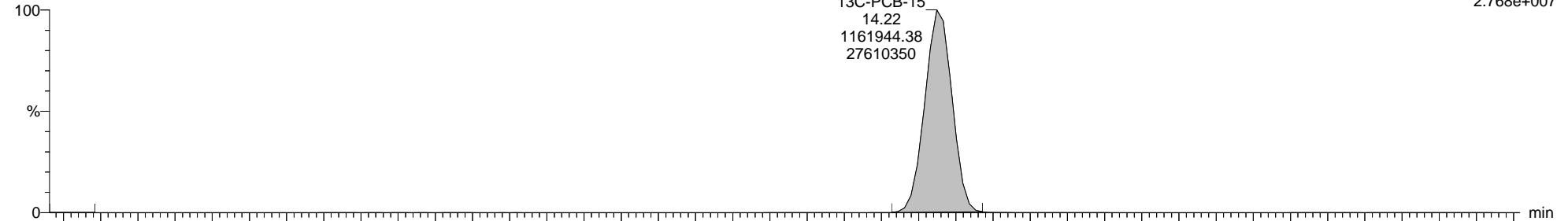
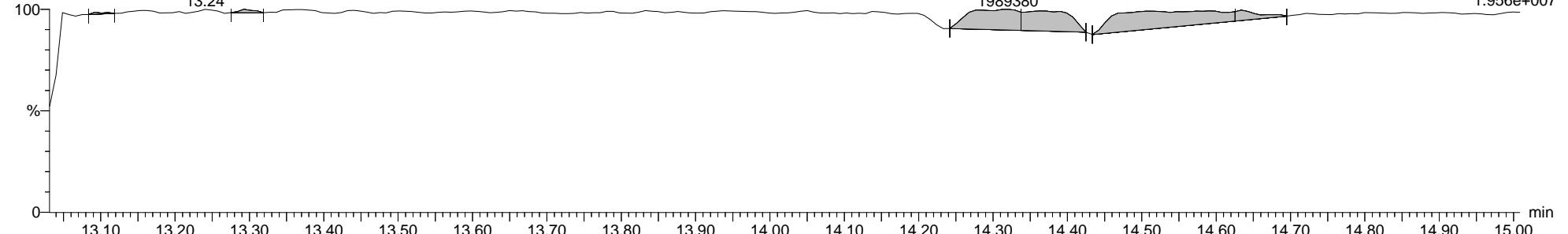
**PCB-15**5-150917B03 Smooth(Mn,1x1)  
1668A-CS#5-015 H5-15-CS5-011F2:Voltage SIR,EI+  
222.0003  
8.991e+008

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Name: 5-150917B03, Date: 17-Sep-2015, Time: 16:46:19, ID: H5-15-CS5-011, Description: 1668A-CS#5-015, Vial: Tray1:7

**13C-PCB-15**5-150917B03 Smooth(Mn,1x1)  
1668A-CS#5-015 H5-15-CS5-011F2:Voltage SIR,EI+  
234.0406  
4.348e+0075-150917B03 Smooth(Mn,1x1)  
1668A-CS#5-015 H5-15-CS5-011F2:Voltage SIR,EI+  
236.0376  
2.768e+0075-150917B03 Smooth(Mn,1x1)  
1668A-CS#5-015 H5-15-CS5-011F2:Voltage SIR,EI+  
242.9856  
1.956e+007

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

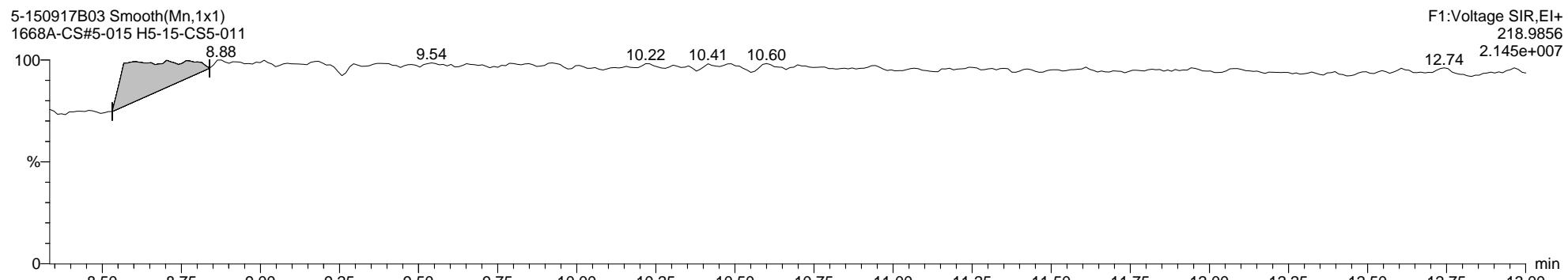
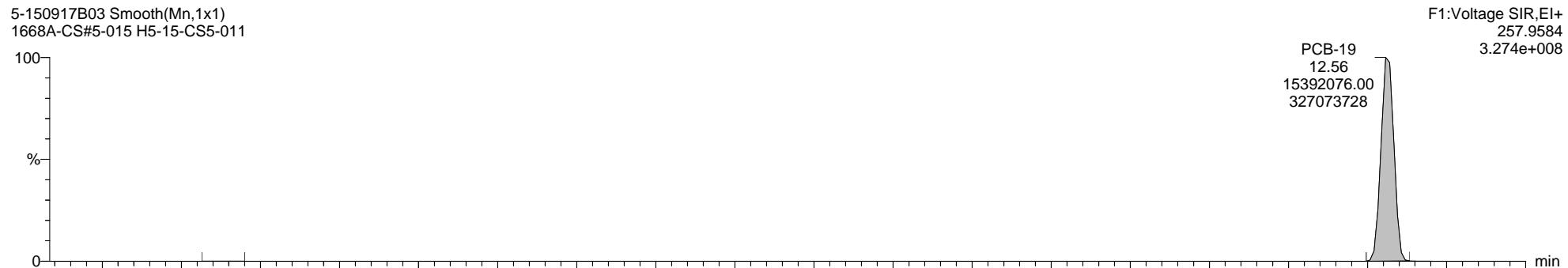
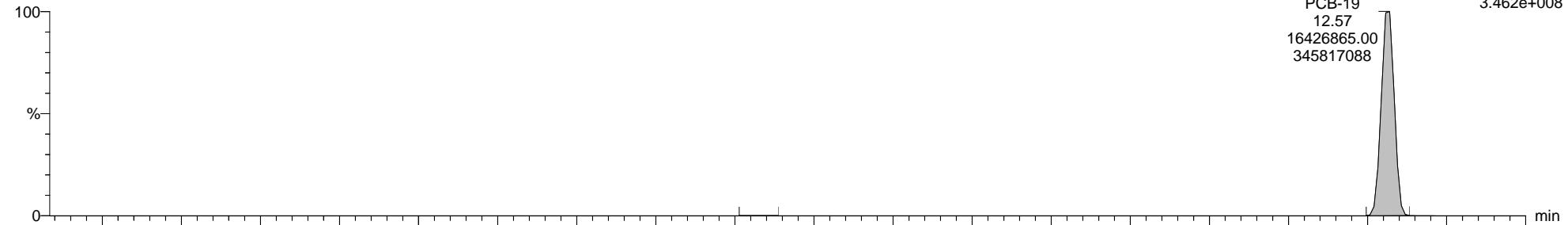
Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Name: 5-150917B03, Date: 17-Sep-2015, Time: 16:46:19, ID: H5-15-CS5-011, Description: 1668A-CS#5-015, Vial: Tray1:7

### PCB-19

5-150917B03 Smooth(Mn,1x1)  
1668A-CS#5-015 H5-15-CS5-011

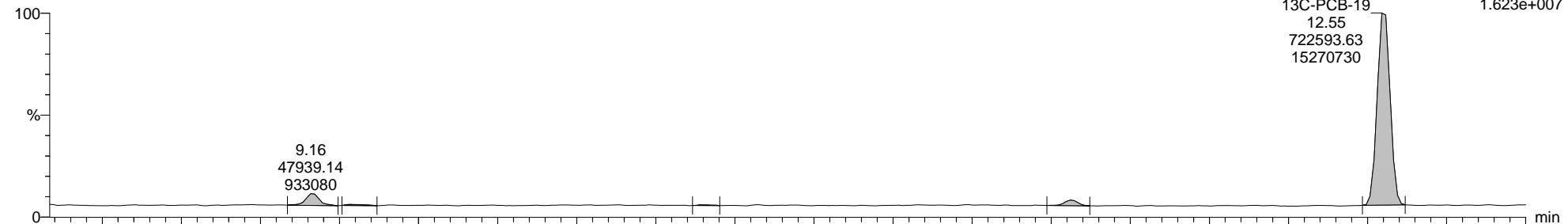
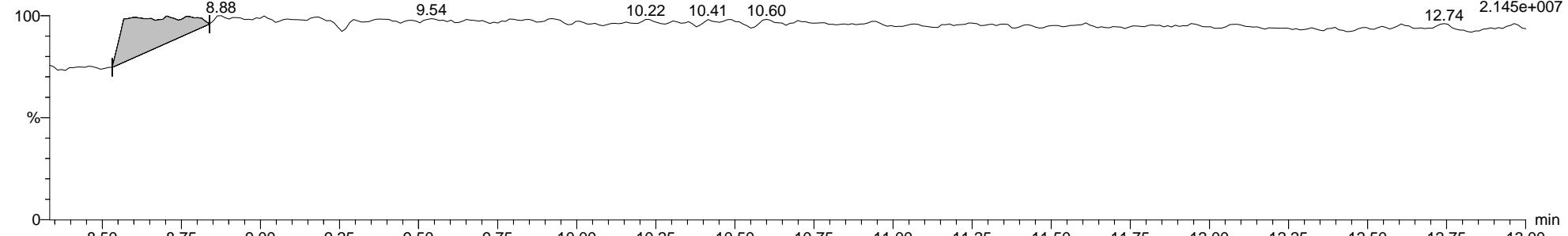


Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Name: 5-150917B03, Date: 17-Sep-2015, Time: 16:46:19, ID: H5-15-CS5-011, Description: 1668A-CS#5-015, Vial: Tray1:7

**13C-PCB-19**5-150917B03 Smooth(Mn,1x1)  
1668A-CS#5-015 H5-15-CS5-0115-150917B03 Smooth(Mn,1x1)  
1668A-CS#5-015 H5-15-CS5-0115-150917B03 Smooth(Mn,1x1)  
1668A-CS#5-015 H5-15-CS5-011

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

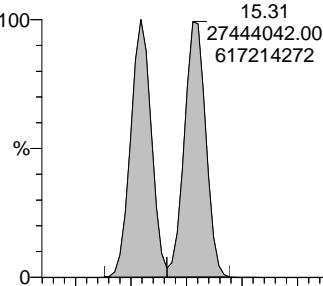
Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Name: 5-150917B03, Date: 17-Sep-2015, Time: 16:46:19, ID: H5-15-CS5-011, Description: 1668A-CS#5-015, Vial: Tray1:7

**PCB-37**

5-150917B03 Smooth(Mn,1x1)

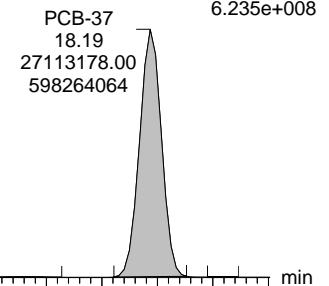
1668A-CS#5-015 H5-15-CS5-011



F3:Voltage SIR,EI+

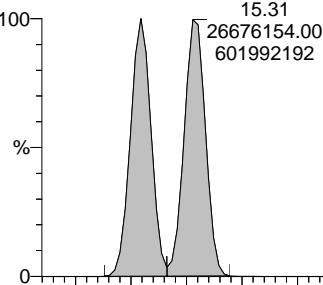
255.9613

6.235e+008



5-150917B03 Smooth(Mn,1x1)

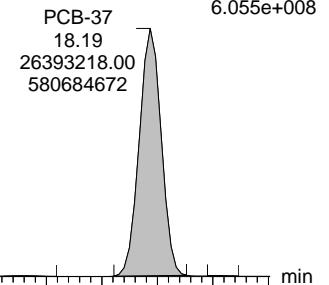
1668A-CS#5-015 H5-15-CS5-011



F3:Voltage SIR,EI+

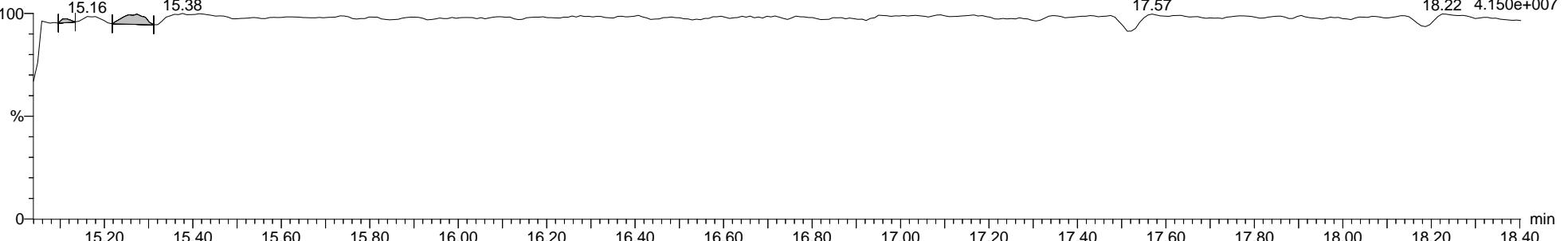
257.9584

6.055e+008



5-150917B03 Smooth(Mn,1x1)

1668A-CS#5-015 H5-15-CS5-011



F3:Voltage SIR,EI+

280.9825

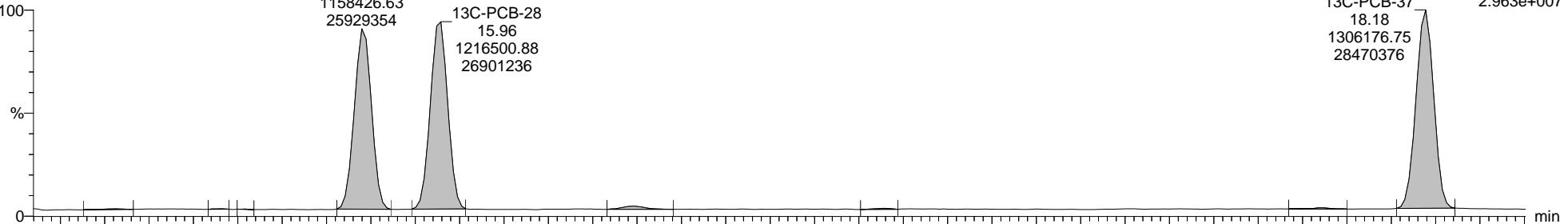
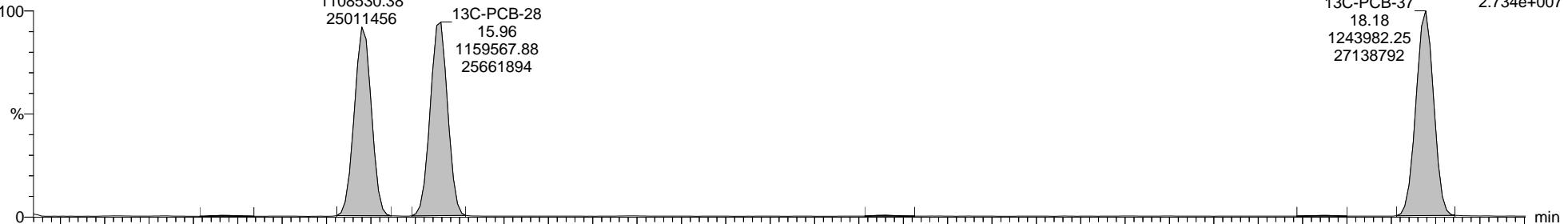
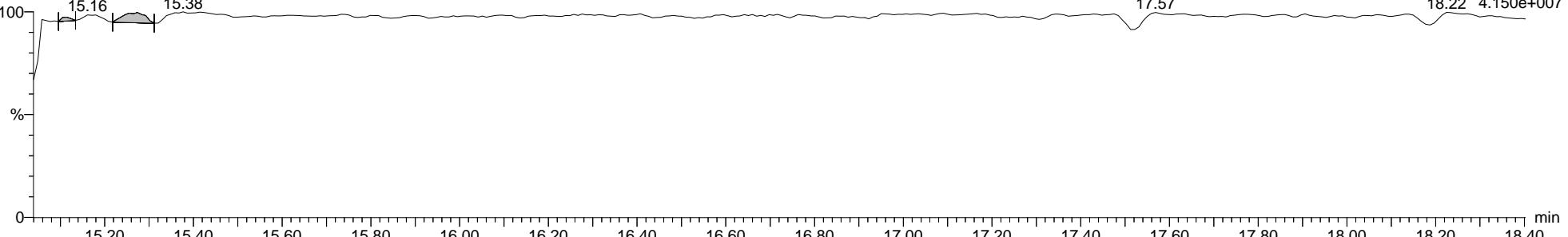
18.22 4.150e+007

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Name: 5-150917B03, Date: 17-Sep-2015, Time: 16:46:19, ID: H5-15-CS5-011, Description: 1668A-CS#5-015, Vial: Tray1:7

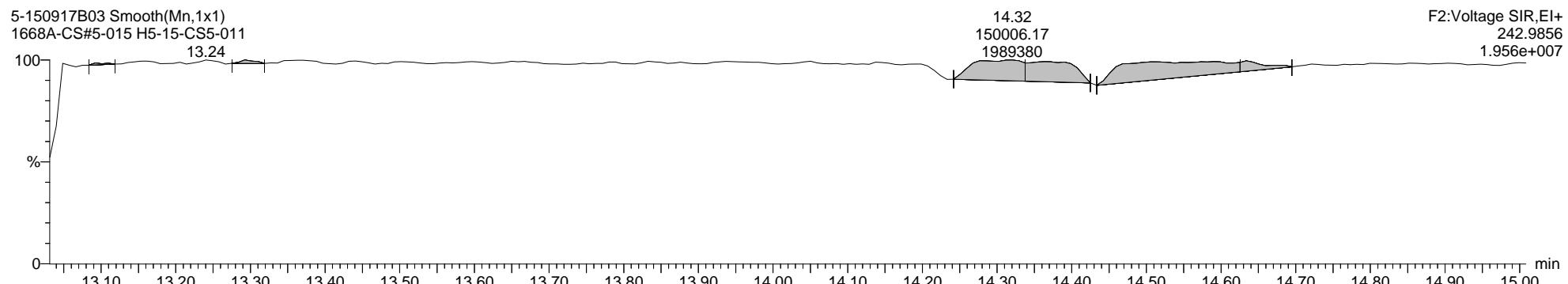
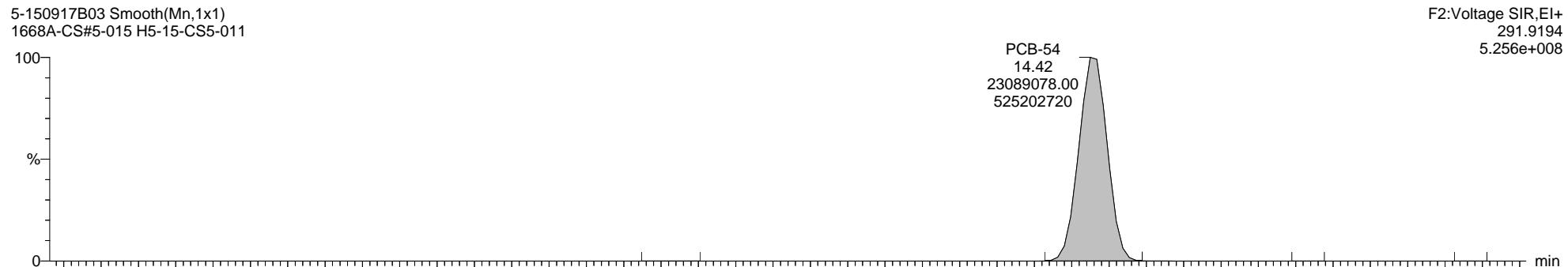
**13C-PCB-37**5-150917B03 Smooth(Mn,1x1)  
1668A-CS#5-015 H5-15-CS5-01113C-PCB-31  
15.78  
1158426.63  
25929354  
13C-PCB-28  
15.96  
1216500.88  
269012365-150917B03 Smooth(Mn,1x1)  
1668A-CS#5-015 H5-15-CS5-01113C-PCB-31  
15.78  
1108530.38  
25011456  
13C-PCB-28  
15.96  
1159567.88  
256618945-150917B03 Smooth(Mn,1x1)  
1668A-CS#5-015 H5-15-CS5-01115.16  
15.38  
17.57

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Name: 5-150917B03, Date: 17-Sep-2015, Time: 16:46:19, ID: H5-15-CS5-011, Description: 1668A-CS#5-015, Vial: Tray1:7

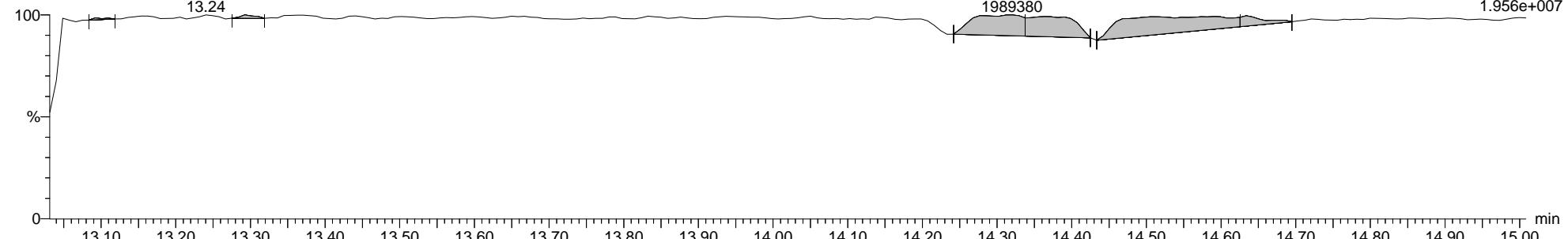
**PCB-54**5-150917B03 Smooth(Mn,1x1)  
1668A-CS#5-015 H5-15-CS5-011

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Name: 5-150917B03, Date: 17-Sep-2015, Time: 16:46:19, ID: H5-15-CS5-011, Description: 1668A-CS#5-015, Vial: Tray1:7

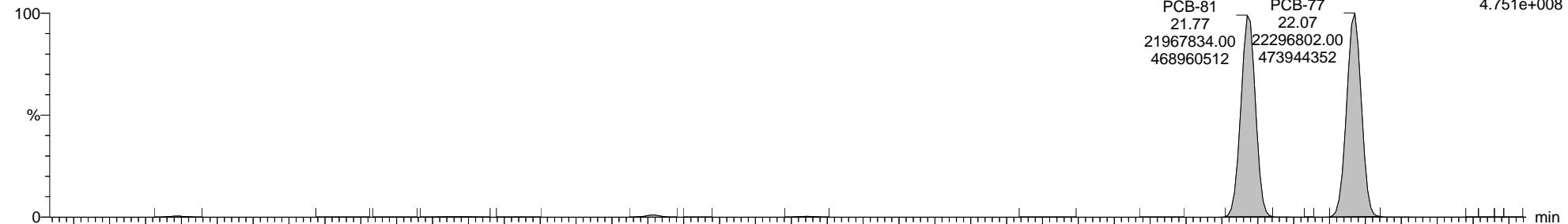
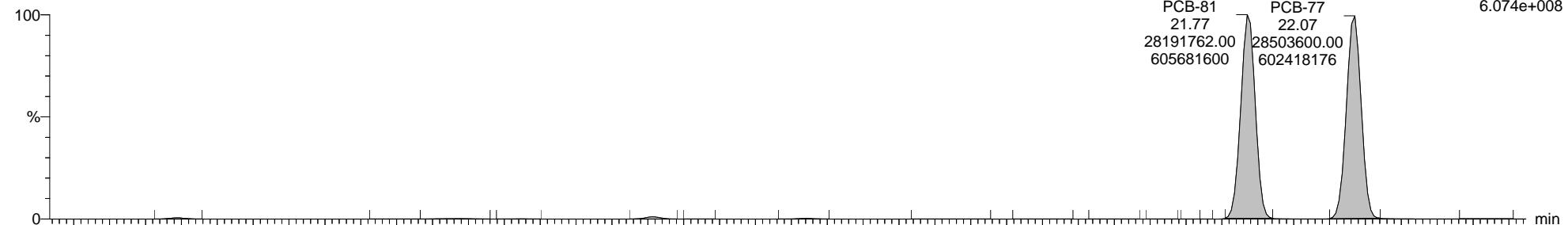
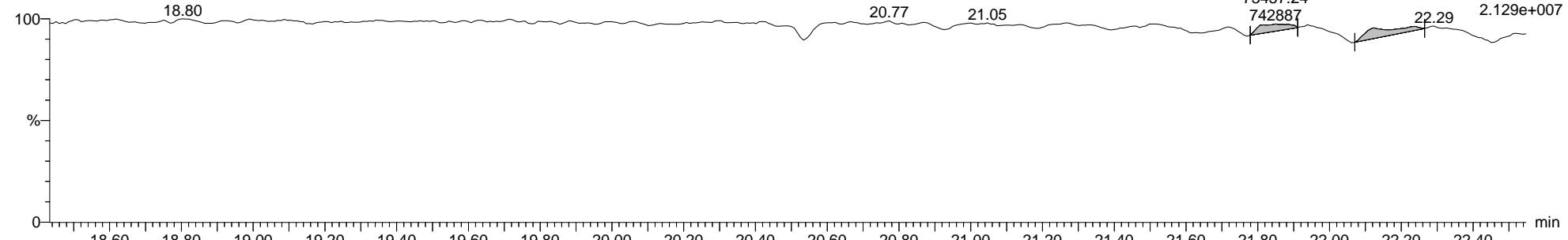
**13C-PCB-54**5-150917B03 Smooth(Mn,1x1)  
1668A-CS#5-015 H5-15-CS5-0115-150917B03 Smooth(Mn,1x1)  
1668A-CS#5-015 H5-15-CS5-0115-150917B03 Smooth(Mn,1x1)  
1668A-CS#5-015 H5-15-CS5-011

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Name: 5-150917B03, Date: 17-Sep-2015, Time: 16:46:19, ID: H5-15-CS5-011, Description: 1668A-CS#5-015, Vial: Tray1:7

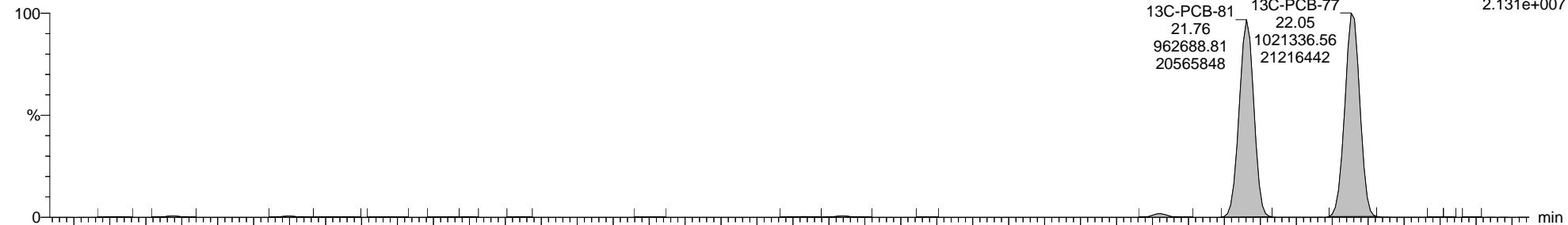
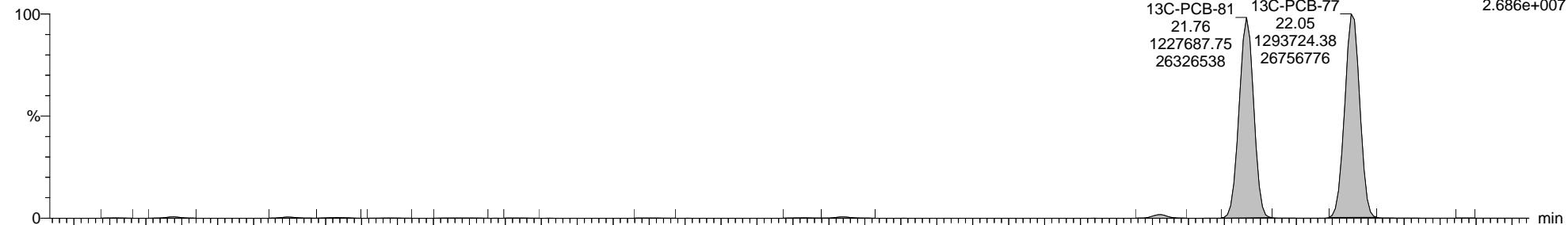
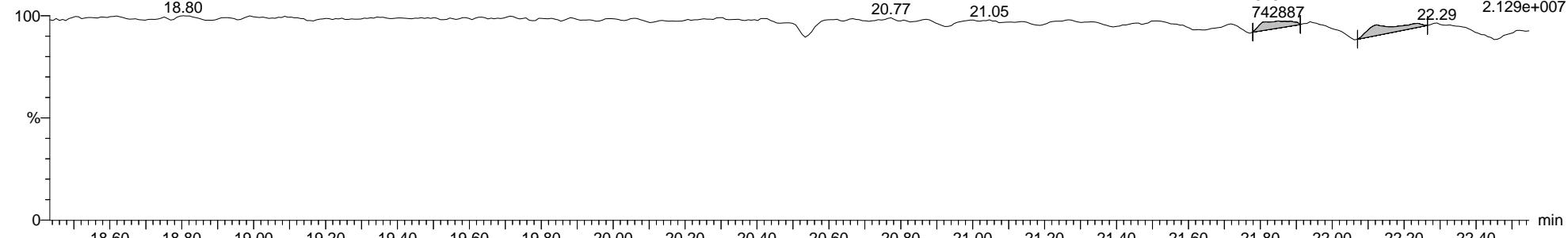
**PCB-81**5-150917B03 Smooth(Mn,1x1)  
1668A-CS#5-015 H5-15-CS5-0115-150917B03 Smooth(Mn,1x1)  
1668A-CS#5-015 H5-15-CS5-0115-150917B03 Smooth(Mn,1x1)  
1668A-CS#5-015 H5-15-CS5-011

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

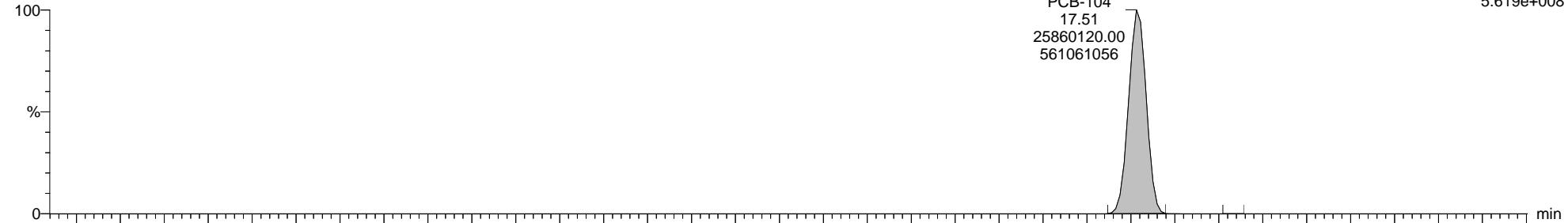
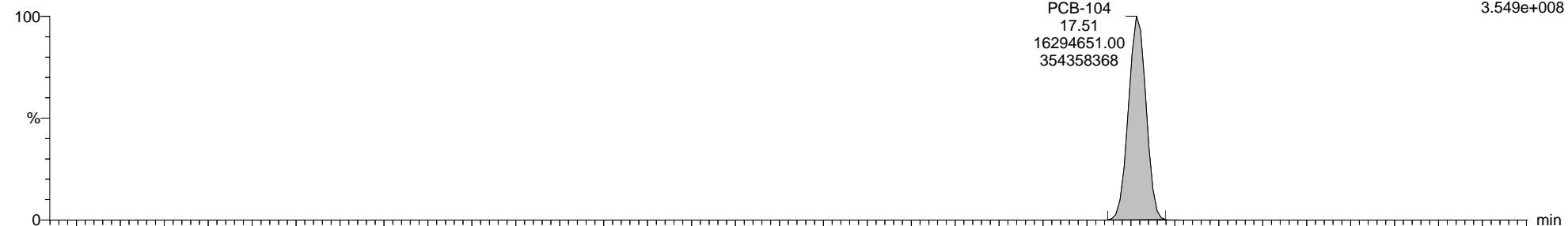
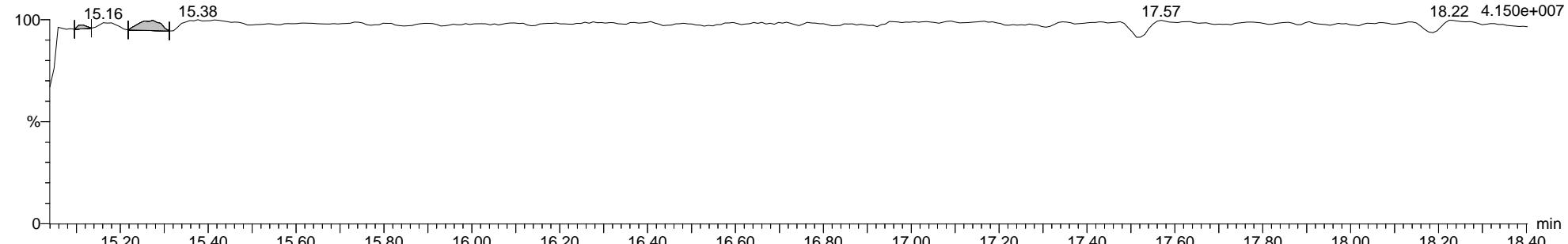
Name: 5-150917B03, Date: 17-Sep-2015, Time: 16:46:19, ID: H5-15-CS5-011, Description: 1668A-CS#5-015, Vial: Tray1:7

**13C-PCB-81**5-150917B03 Smooth(Mn,1x1)  
1668A-CS#5-015 H5-15-CS5-0115-150917B03 Smooth(Mn,1x1)  
1668A-CS#5-015 H5-15-CS5-0115-150917B03 Smooth(Mn,1x1)  
1668A-CS#5-015 H5-15-CS5-011

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

**Name: 5-150917B03, Date: 17-Sep-2015, Time: 16:46:19, ID: H5-15-CS5-011, Description: 1668A-CS#5-015, Vial: Tray1:7****PCB-104**5-150917B03 Smooth(Mn,1x1)  
1668A-CS#5-015 H5-15-CS5-0115-150917B03 Smooth(Mn,1x1)  
1668A-CS#5-015 H5-15-CS5-0115-150917B03 Smooth(Mn,1x1)  
1668A-CS#5-015 H5-15-CS5-011

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

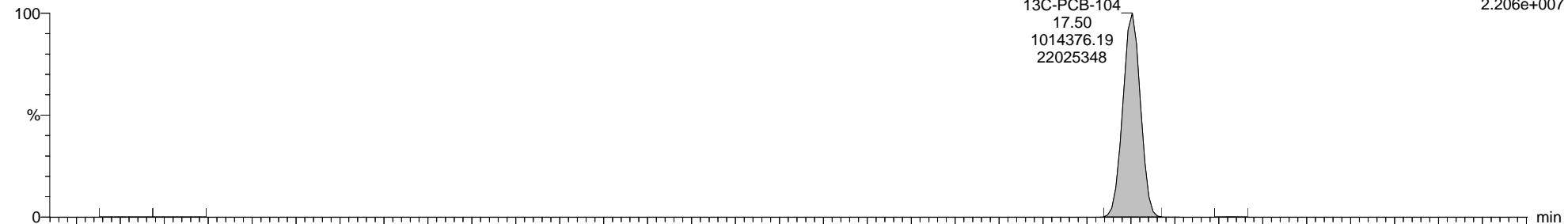
Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Name: 5-150917B03, Date: 17-Sep-2015, Time: 16:46:19, ID: H5-15-CS5-011, Description: 1668A-CS#5-015, Vial: Tray1:7

### 13C-PCB-104

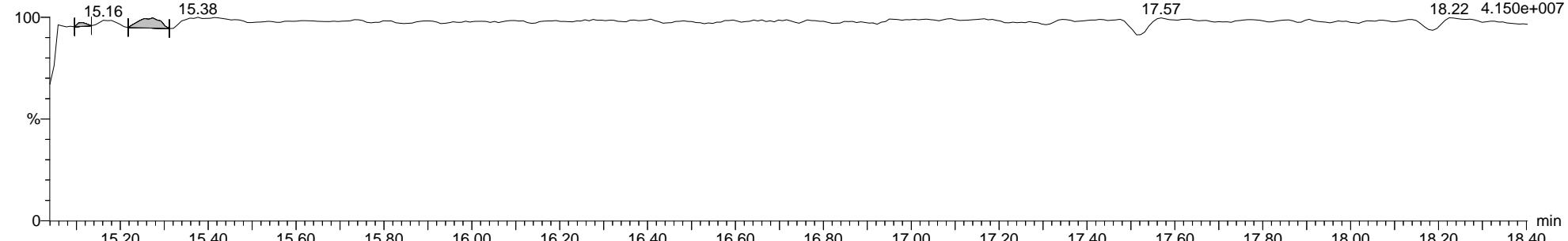
5-150917B03 Smooth(Mn,1x1)  
1668A-CS#5-015 H5-15-CS5-011



5-150917B03 Smooth(Mn,1x1)  
1668A-CS#5-015 H5-15-CS5-011



5-150917B03 Smooth(Mn,1x1)  
1668A-CS#5-015 H5-15-CS5-011

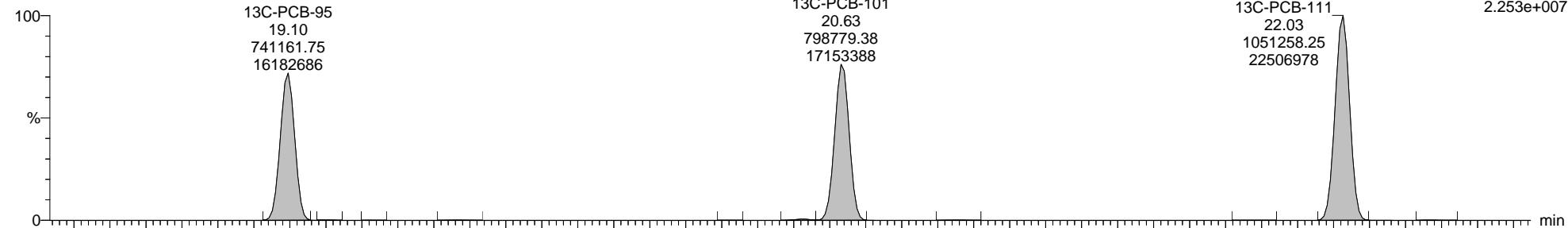
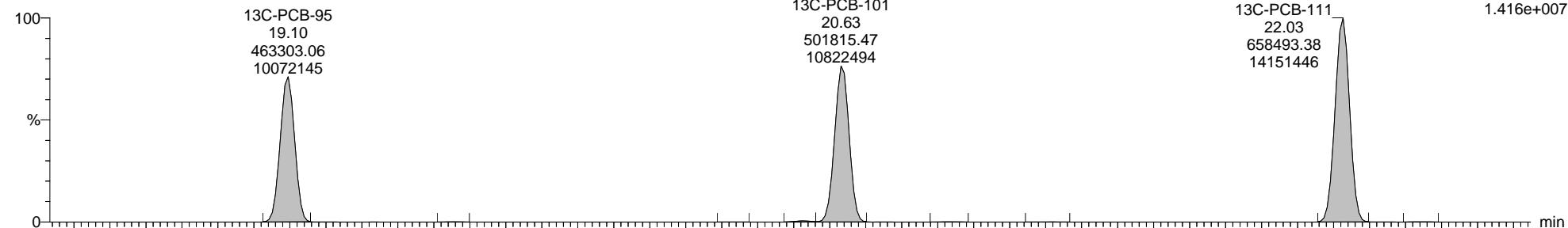
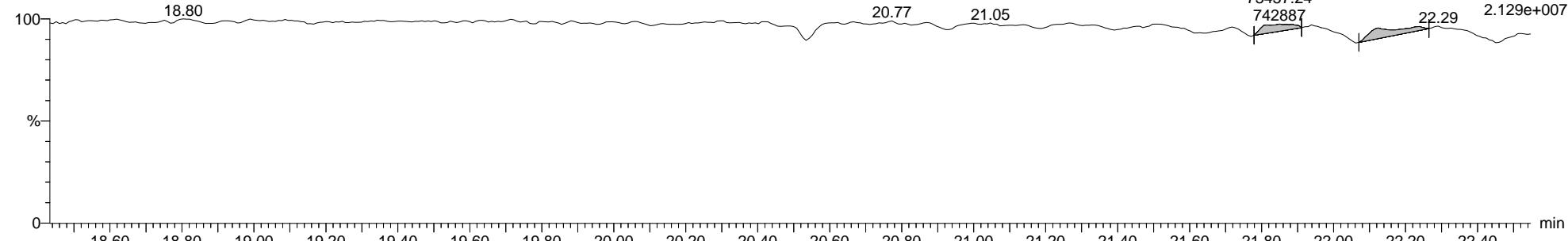


Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Name: 5-150917B03, Date: 17-Sep-2015, Time: 16:46:19, ID: H5-15-CS5-011, Description: 1668A-CS#5-015, Vial: Tray1:7

**13C-PCB-111**5-150917B03 Smooth(Mn,1x1)  
1668A-CS#5-015 H5-15-CS5-0115-150917B03 Smooth(Mn,1x1)  
1668A-CS#5-015 H5-15-CS5-0115-150917B03 Smooth(Mn,1x1)  
1668A-CS#5-015 H5-15-CS5-011

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Name: 5-150917B03, Date: 17-Sep-2015, Time: 16:46:19, ID: H5-15-CS5-011, Description: 1668A-CS#5-015, Vial: Tray1:7

**PCB-123**

5-150917B03 Smooth(Mn,1x1)

1668A-CS#5-015 H5-15-CS5-011

PCB-118;23.25;26170248.00;511004864

PCB-105

23.89

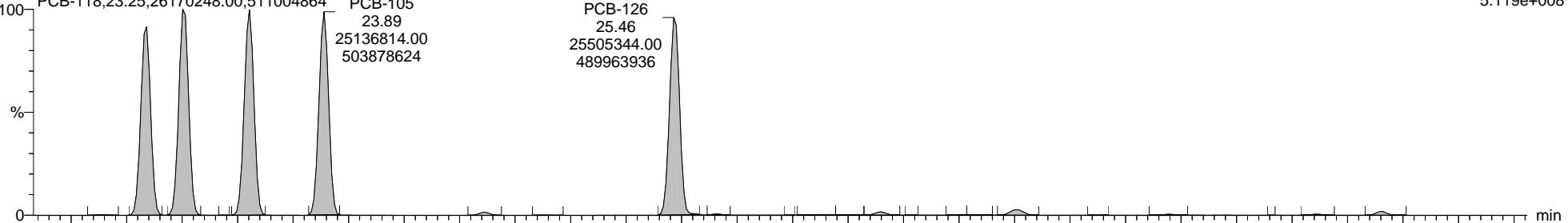
25136814.00

503878624

F5:Voltage SIR,EI+

325.8804

5.119e+008



5-150917B03 Smooth(Mn,1x1)

1668A-CS#5-015 H5-15-CS5-011

PCB-118;23.25;16733872.00;328298112

PCB-105

23.89

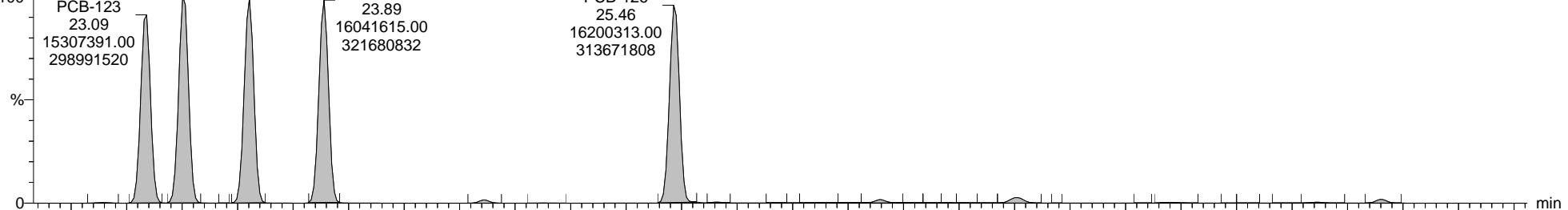
16041615.00

321680832

F5:Voltage SIR,EI+

327.8775

3.288e+008



5-150917B03 Smooth(Mn,1x1)

1668A-CS#5-015 H5-15-CS5-011

PCB-114;23.60;33488.74;498223

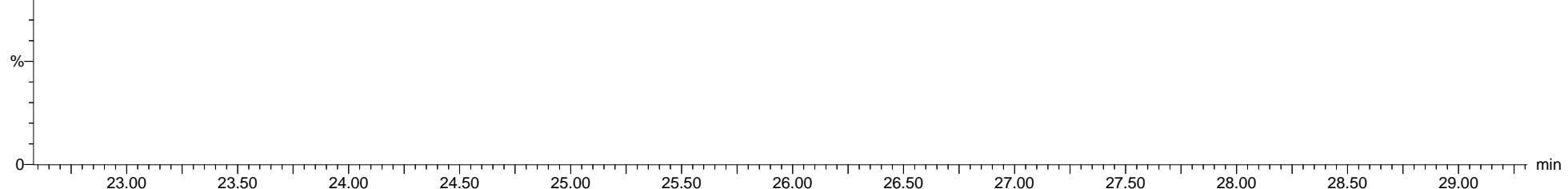
22.72 23.03 23.41 24.69 25.09 25.23 25.37

25.74 25.88 26.23 26.69 26.92 27.14 27.24

F5:Voltage SIR,EI+

354.9792

5.270e+006

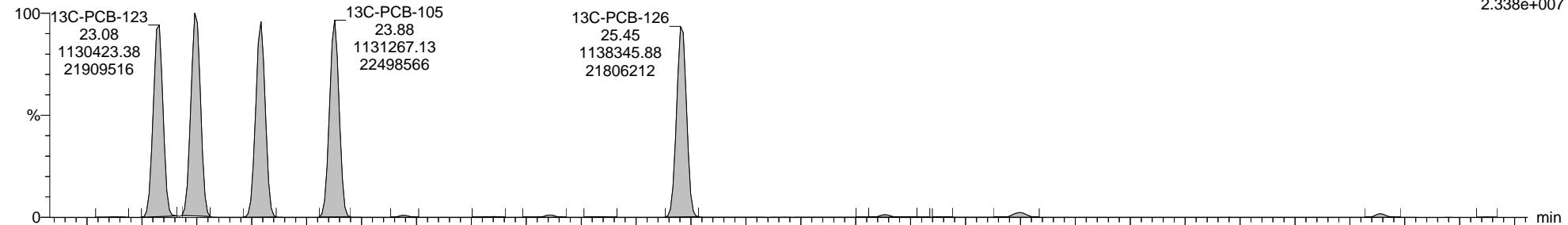
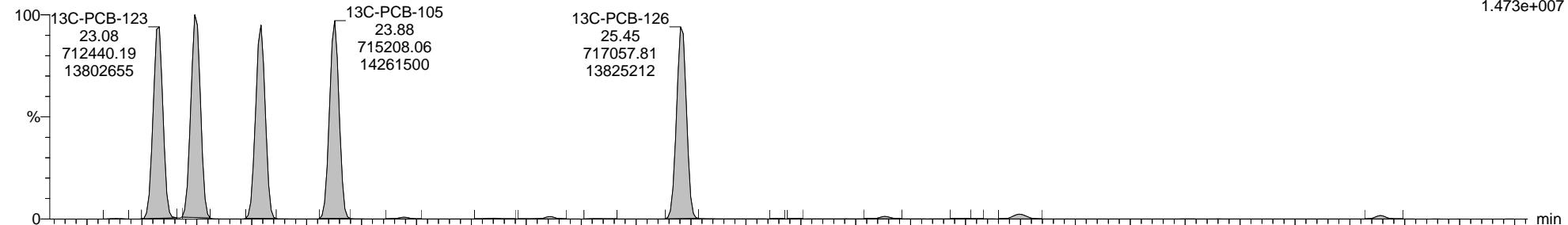
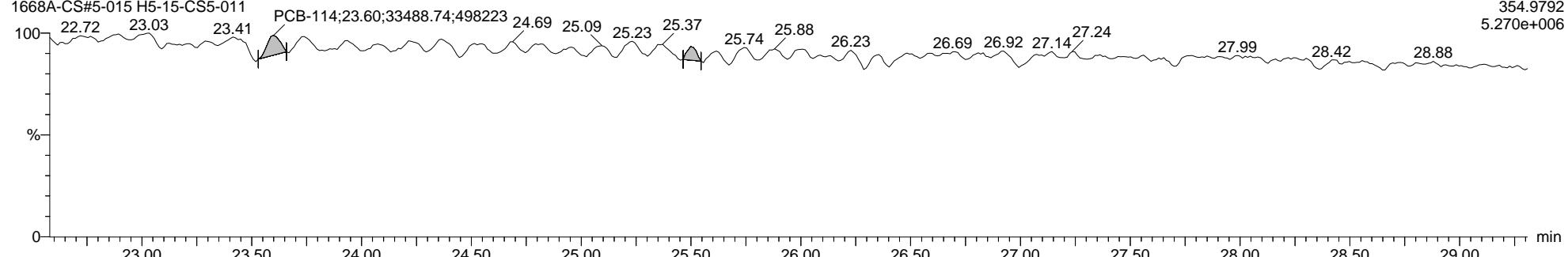


Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

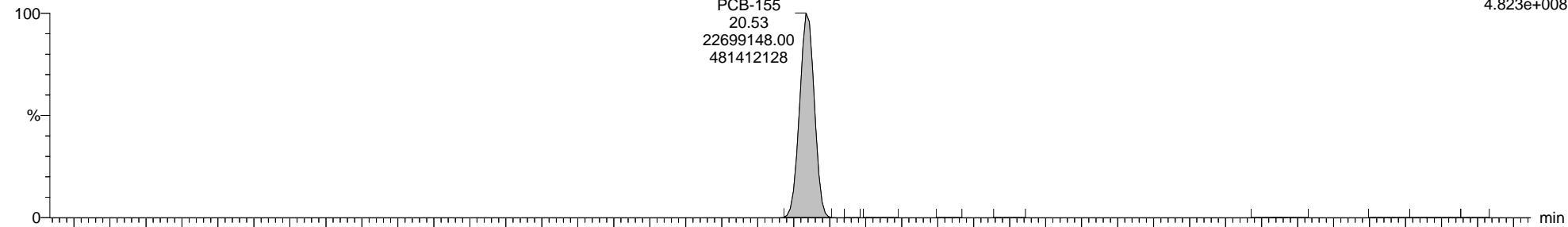
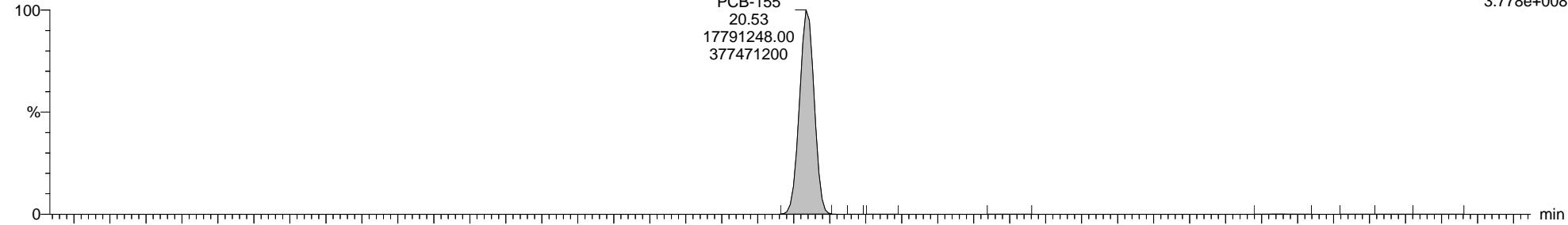
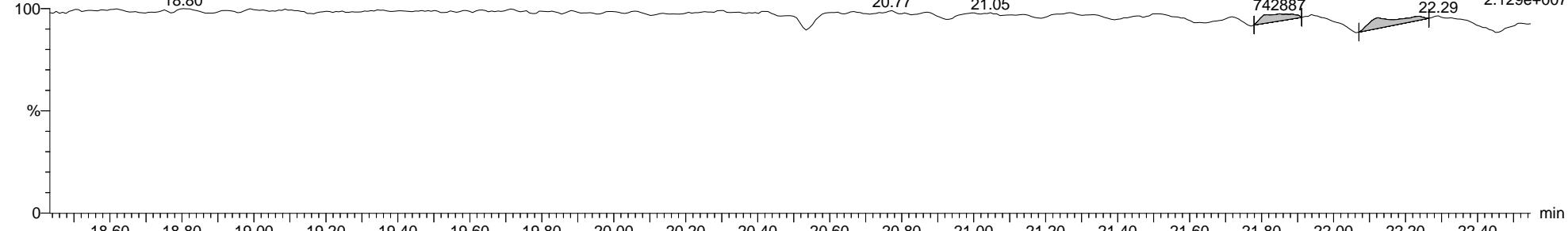
Name: 5-150917B03, Date: 17-Sep-2015, Time: 16:46:19, ID: H5-15-CS5-011, Description: 1668A-CS#5-015, Vial: Tray1:7

**13C-PCB-123**5-150917B03 Smooth(Mn,1x1)  
1668A-CS#5-015 H5-15-CS5-0115-150917B03 Smooth(Mn,1x1)  
1668A-CS#5-015 H5-15-CS5-0115-150917B03 Smooth(Mn,1x1)  
1668A-CS#5-015 H5-15-CS5-011

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

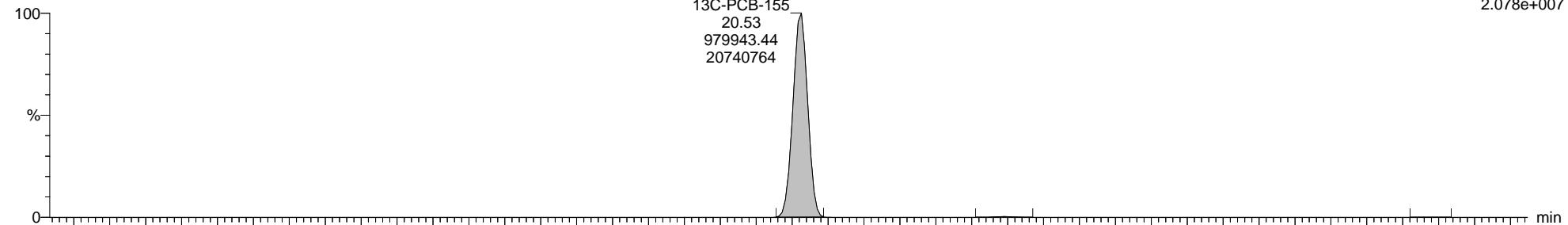
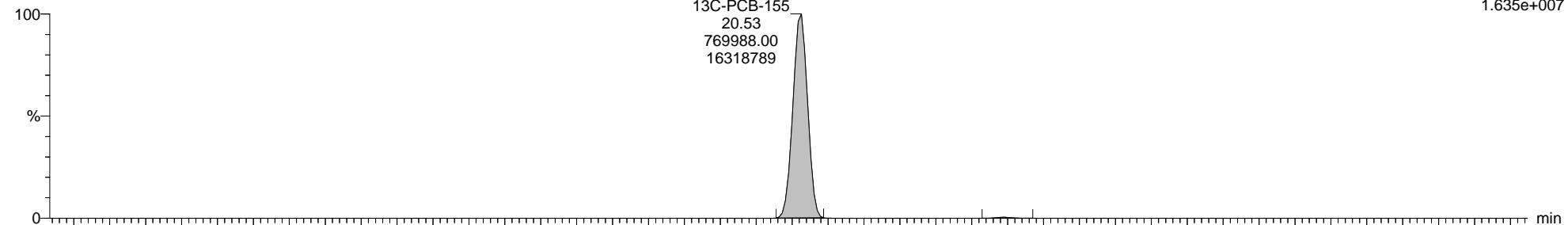
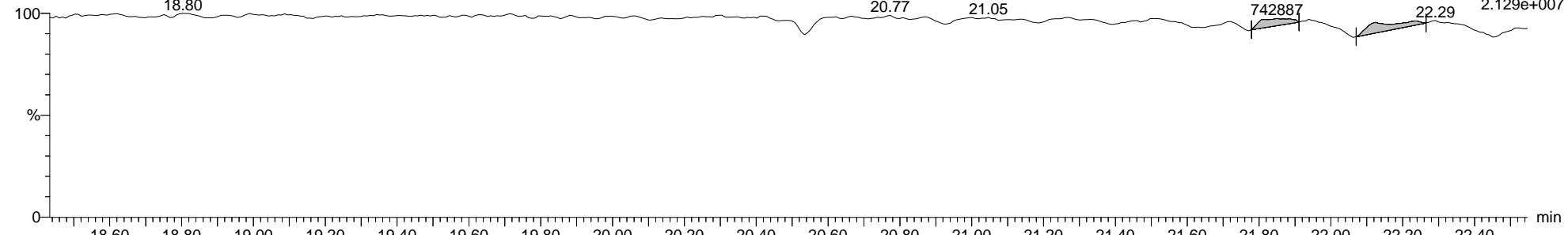
Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

**Name: 5-150917B03, Date: 17-Sep-2015, Time: 16:46:19, ID: H5-15-CS5-011, Description: 1668A-CS#5-015, Vial: Tray1:7****PCB-155**5-150917B03 Smooth(Mn,1x1)  
1668A-CS#5-015 H5-15-CS5-0115-150917B03 Smooth(Mn,1x1)  
1668A-CS#5-015 H5-15-CS5-011F4:Voltage SIR,EI+  
361.8385  
3.778e+0085-150917B03 Smooth(Mn,1x1)  
1668A-CS#5-015 H5-15-CS5-011F4:Voltage SIR,EI+  
330.9792  
2.129e+007

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

**Name: 5-150917B03, Date: 17-Sep-2015, Time: 16:46:19, ID: H5-15-CS5-011, Description: 1668A-CS#5-015, Vial: Tray1:7****13C-PCB-155**5-150917B03 Smooth(Mn,1x1)  
1668A-CS#5-015 H5-15-CS5-0115-150917B03 Smooth(Mn,1x1)  
1668A-CS#5-015 H5-15-CS5-011F4:Voltage SIR,EI+  
373.8789  
1.635e+0075-150917B03 Smooth(Mn,1x1)  
1668A-CS#5-015 H5-15-CS5-011F4:Voltage SIR,EI+  
330.9792  
2.129e+007

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

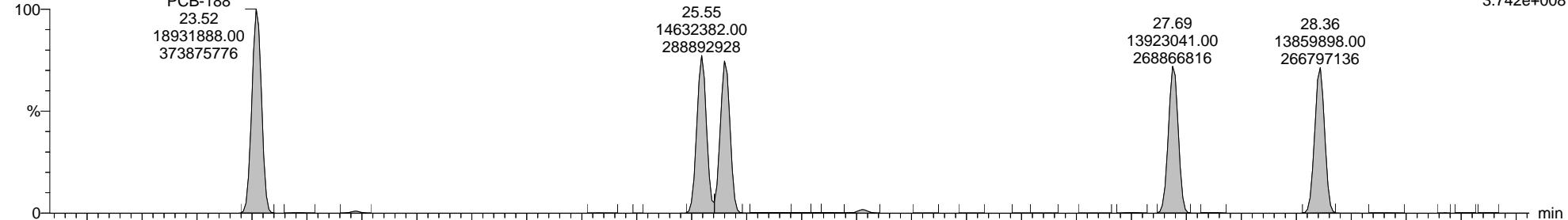
Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

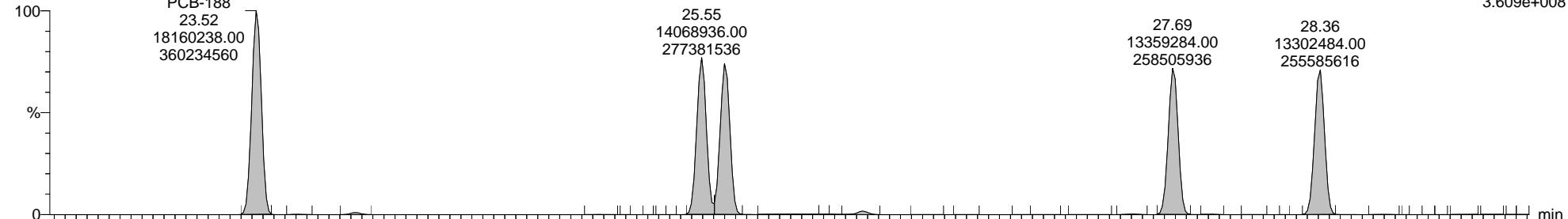
Name: 5-150917B03, Date: 17-Sep-2015, Time: 16:46:19, ID: H5-15-CS5-011, Description: 1668A-CS#5-015, Vial: Tray1:7

**PCB-188**5-150917B03 Smooth(Mn,1x1)  
1668A-CS#5-015 H5-15-CS5-011

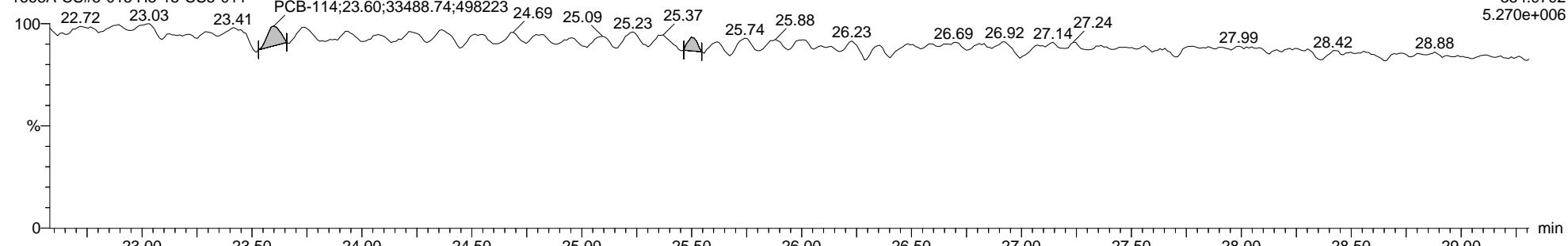
PCB-188

F5:Voltage SIR,EI+  
393.8025  
3.742e+0085-150917B03 Smooth(Mn,1x1)  
1668A-CS#5-015 H5-15-CS5-011

PCB-188

F5:Voltage SIR,EI+  
395.7995  
3.609e+0085-150917B03 Smooth(Mn,1x1)  
1668A-CS#5-015 H5-15-CS5-011

PCB-114;23.60;33488.74;498223

F5:Voltage SIR,EI+  
354.9792  
5.270e+006

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

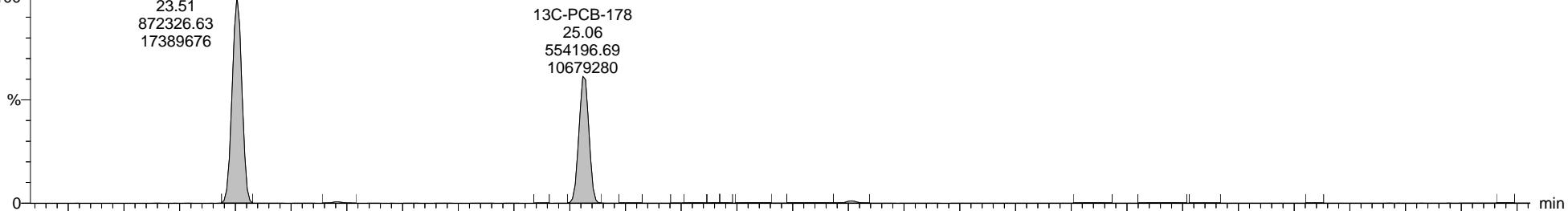
Name: 5-150917B03, Date: 17-Sep-2015, Time: 16:46:19, ID: H5-15-CS5-011, Description: 1668A-CS#5-015, Vial: Tray1:7

**13C-PCB-188**

5-150917B03 Smooth(Mn,1x1)

1668A-CS#5-015 H5-15-CS5-011

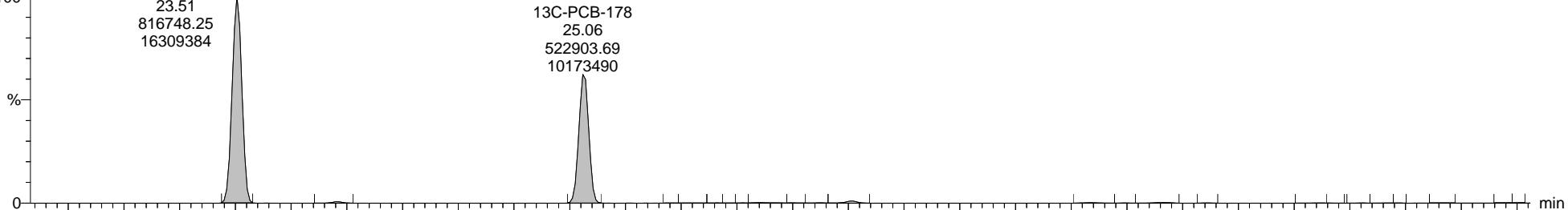
13C-PCB-188



5-150917B03 Smooth(Mn,1x1)

1668A-CS#5-015 H5-15-CS5-011

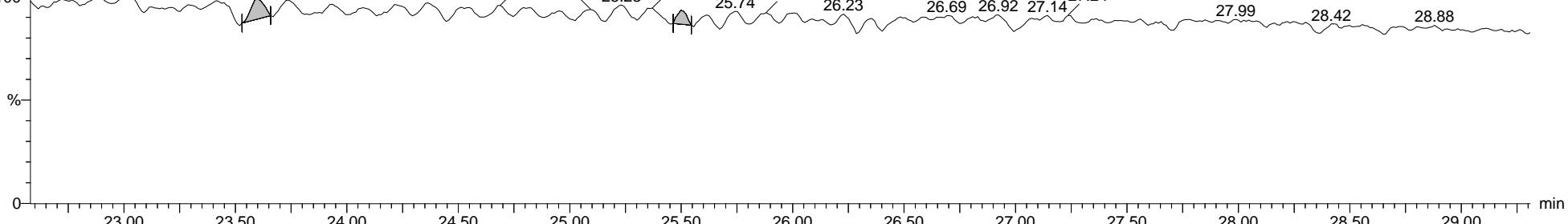
13C-PCB-188



5-150917B03 Smooth(Mn,1x1)

1668A-CS#5-015 H5-15-CS5-011

PCB-114;23.60;33488.74;498223



Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

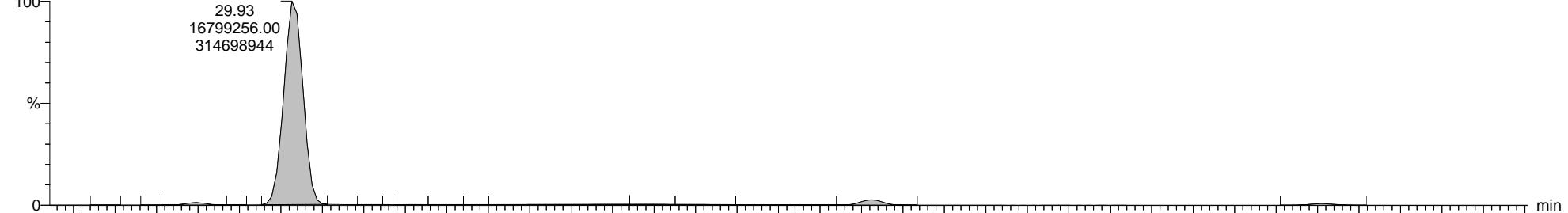
Name: 5-150917B03, Date: 17-Sep-2015, Time: 16:46:19, ID: H5-15-CS5-011, Description: 1668A-CS#5-015, Vial: Tray1:7

**PCB-189**

5-150917B03 Smooth(Mn,1x1)

1668A-CS#5-015 H5-15-CS5-011

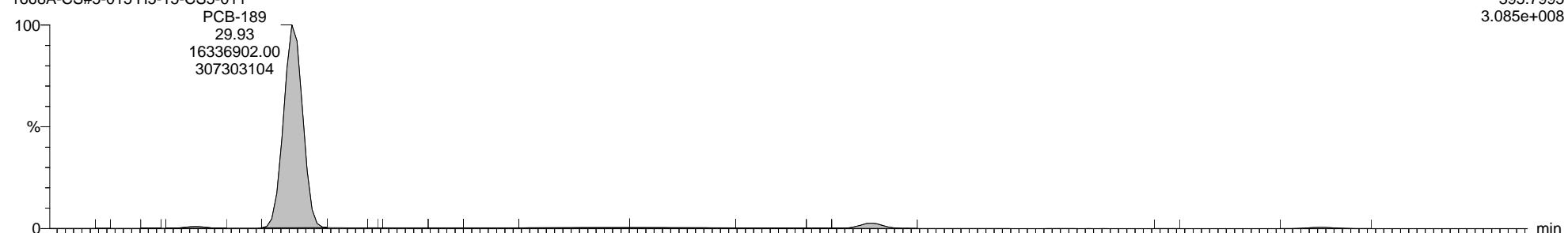
PCB-189



5-150917B03 Smooth(Mn,1x1)

1668A-CS#5-015 H5-15-CS5-011

PCB-189

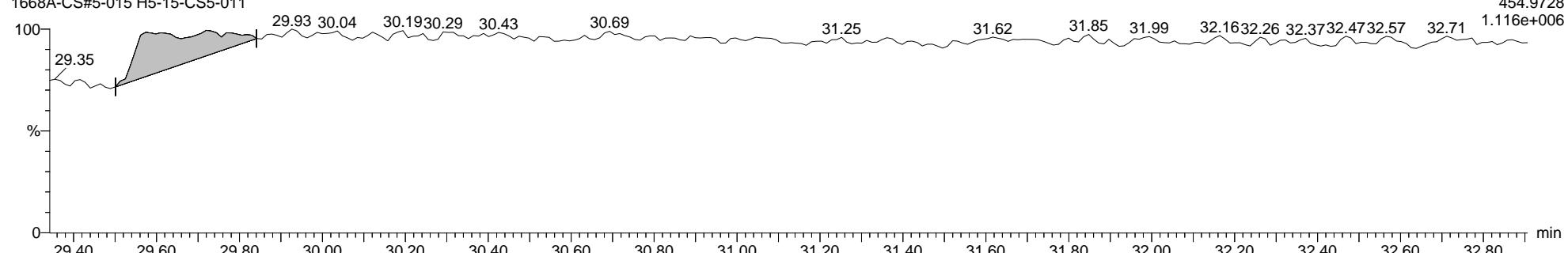


5-150917B03 Smooth(Mn,1x1)

1668A-CS#5-015 H5-15-CS5-011

F6:Voltage SIR,EI+

454.9728



Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

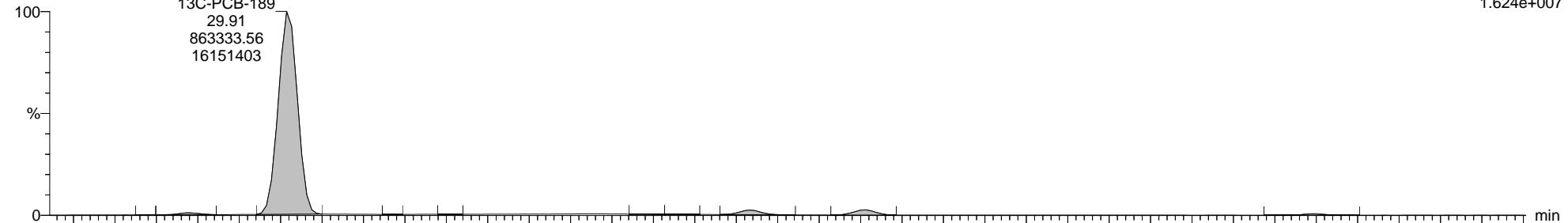
Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Name: 5-150917B03, Date: 17-Sep-2015, Time: 16:46:19, ID: H5-15-CS5-011, Description: 1668A-CS#5-015, Vial: Tray1:7

**13C-PCB-189**

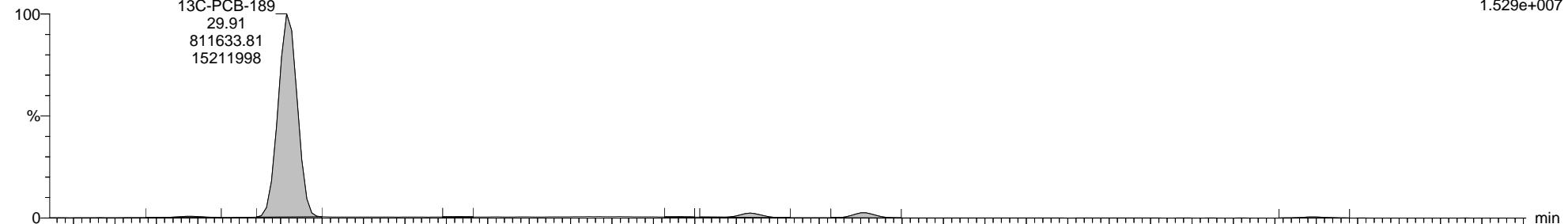
5-150917B03 Smooth(Mn,1x1)

1668A-CS#5-015 H5-15-CS5-011

13C-PCB-189  
29.91  
863333.56  
16151403F6:Voltage SIR,EI+  
405.8428  
1.624e+007

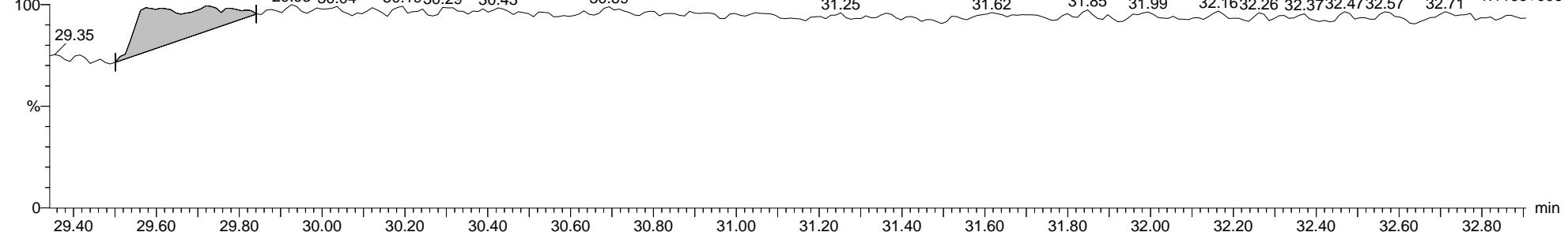
5-150917B03 Smooth(Mn,1x1)

1668A-CS#5-015 H5-15-CS5-011

13C-PCB-189  
29.91  
811633.81  
15211998F6:Voltage SIR,EI+  
407.8399  
1.529e+007

5-150917B03 Smooth(Mn,1x1)

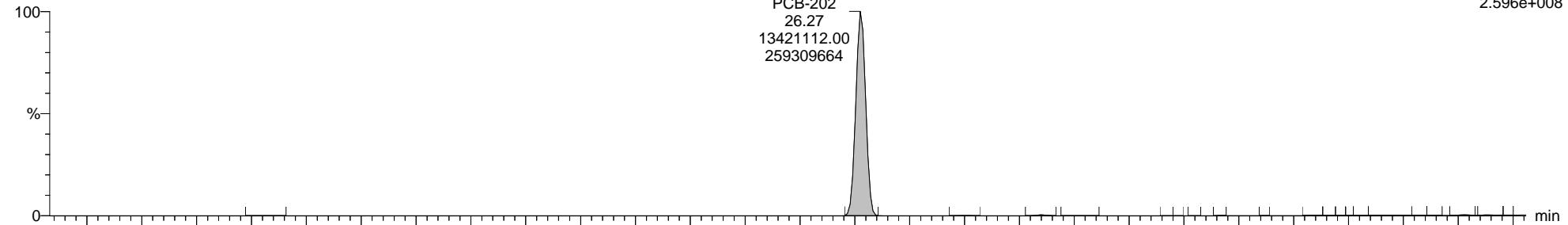
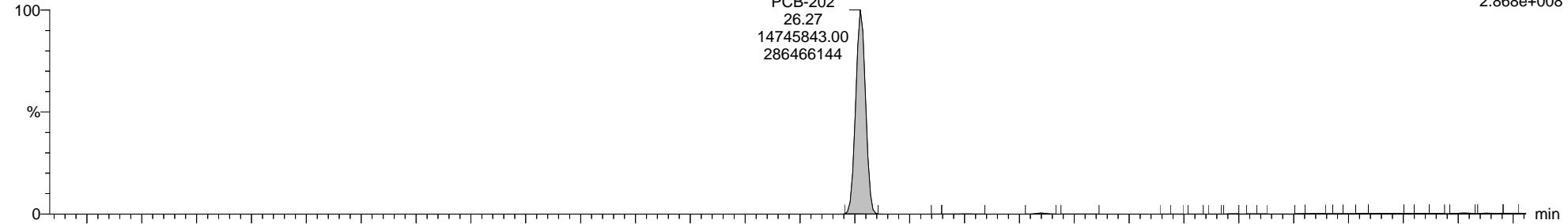
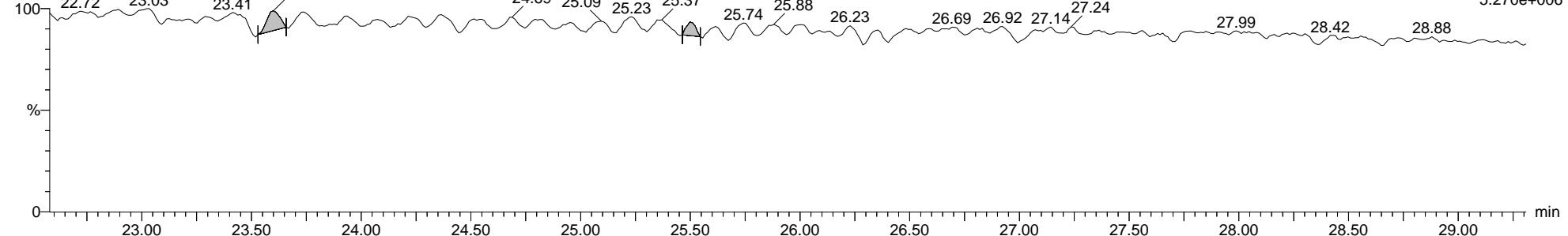
1668A-CS#5-015 H5-15-CS5-011

29.35  
29.93 30.04  
30.19 30.29  
30.43  
30.69  
31.25  
31.62  
31.85  
31.99  
32.16 32.26  
32.37 32.47 32.57  
32.71F6:Voltage SIR,EI+  
454.9728  
1.116e+006

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

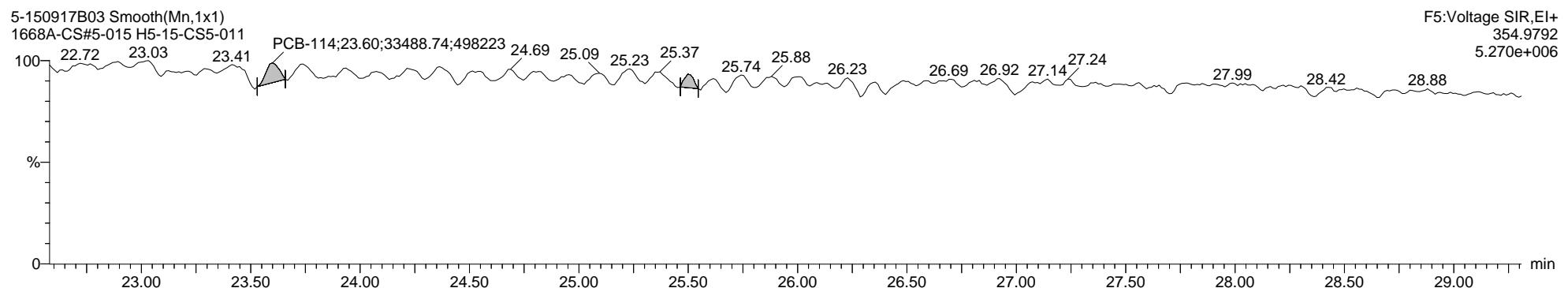
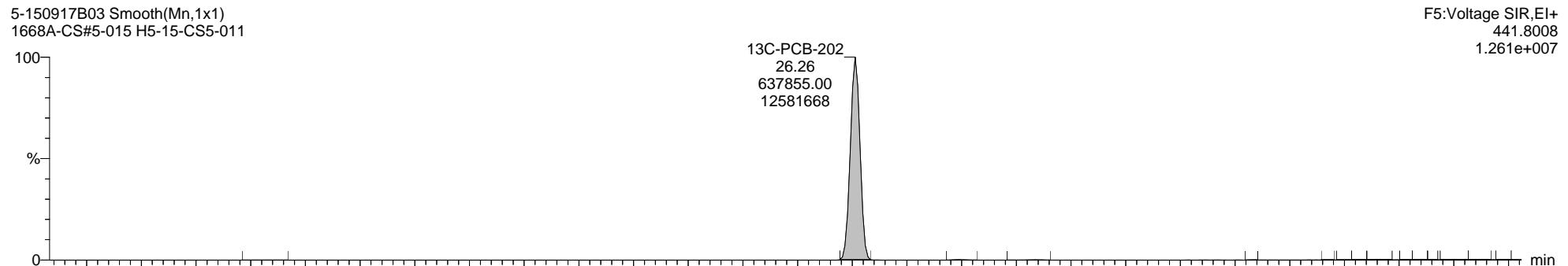
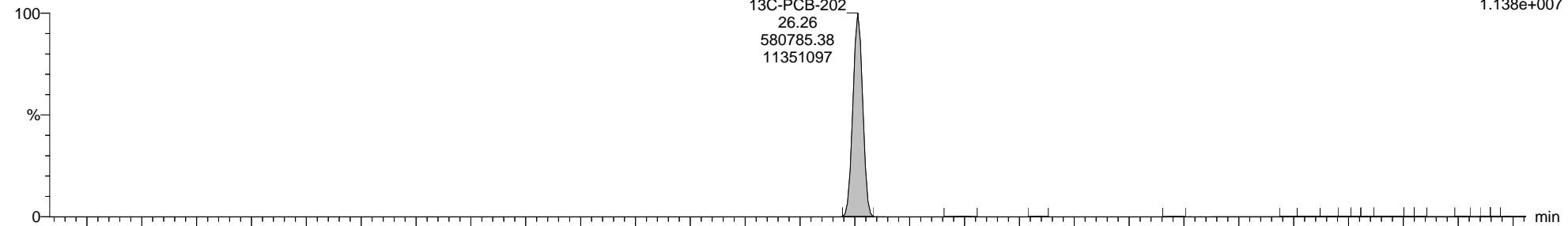
**Name: 5-150917B03, Date: 17-Sep-2015, Time: 16:46:19, ID: H5-15-CS5-011, Description: 1668A-CS#5-015, Vial: Tray1:7****PCB-202**5-150917B03 Smooth(Mn,1x1)  
1668A-CS#5-015 H5-15-CS5-011F5:Voltage SIR,EI+  
427.7635  
2.596e+0085-150917B03 Smooth(Mn,1x1)  
1668A-CS#5-015 H5-15-CS5-011F5:Voltage SIR,EI+  
429.7606  
2.868e+0085-150917B03 Smooth(Mn,1x1)  
1668A-CS#5-015 H5-15-CS5-011F5:Voltage SIR,EI+  
354.9792  
5.270e+006

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Name: 5-150917B03, Date: 17-Sep-2015, Time: 16:46:19, ID: H5-15-CS5-011, Description: 1668A-CS#5-015, Vial: Tray1:7

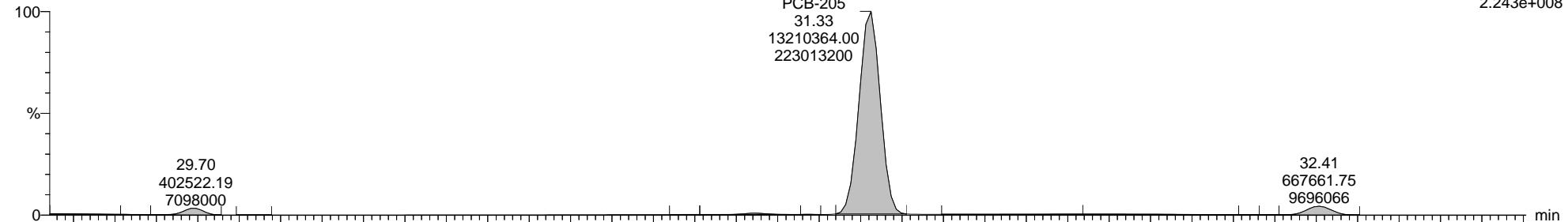
**13C-PCB-202**5-150917B03 Smooth(Mn,1x1)  
1668A-CS#5-015 H5-15-CS5-011F5:Voltage SIR,EI+  
439.8038  
1.138e+007

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Name: 5-150917B03, Date: 17-Sep-2015, Time: 16:46:19, ID: H5-15-CS5-011, Description: 1668A-CS#5-015, Vial: Tray1:7

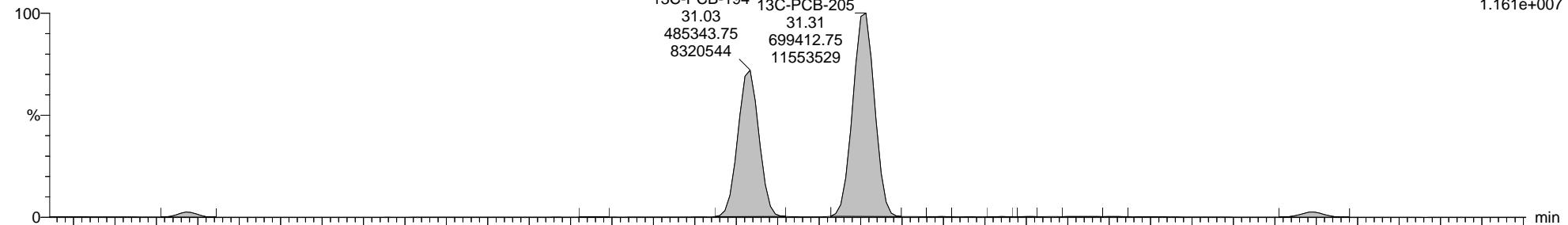
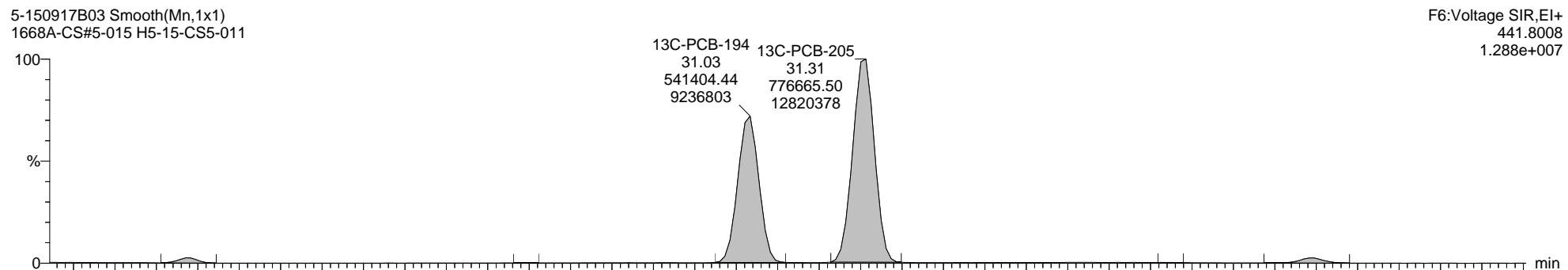
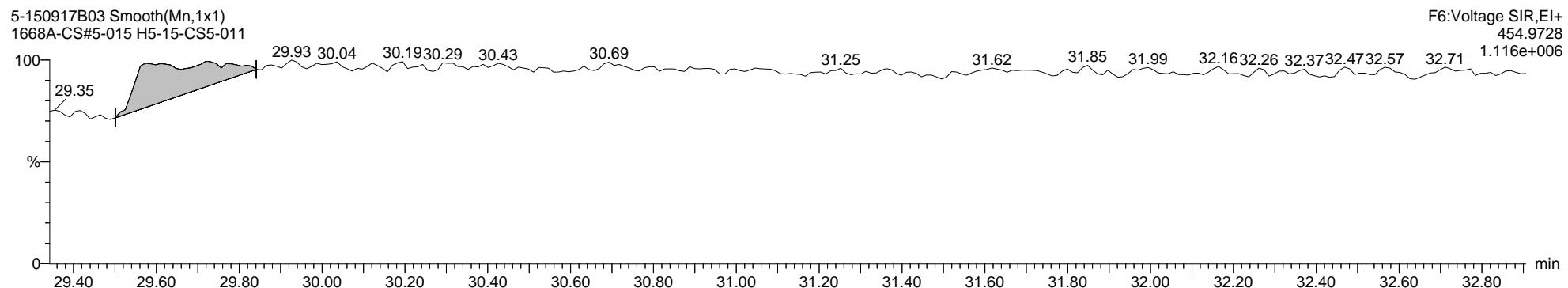
**PCB-205**5-150917B03 Smooth(Mn,1x1)  
1668A-CS#5-015 H5-15-CS5-011

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Name: 5-150917B03, Date: 17-Sep-2015, Time: 16:46:19, ID: H5-15-CS5-011, Description: 1668A-CS#5-015, Vial: Tray1:7

**13C-PCB-205**5-150917B03 Smooth(Mn,1x1)  
1668A-CS#5-015 H5-15-CS5-0115-150917B03 Smooth(Mn,1x1)  
1668A-CS#5-015 H5-15-CS5-0115-150917B03 Smooth(Mn,1x1)  
1668A-CS#5-015 H5-15-CS5-011

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

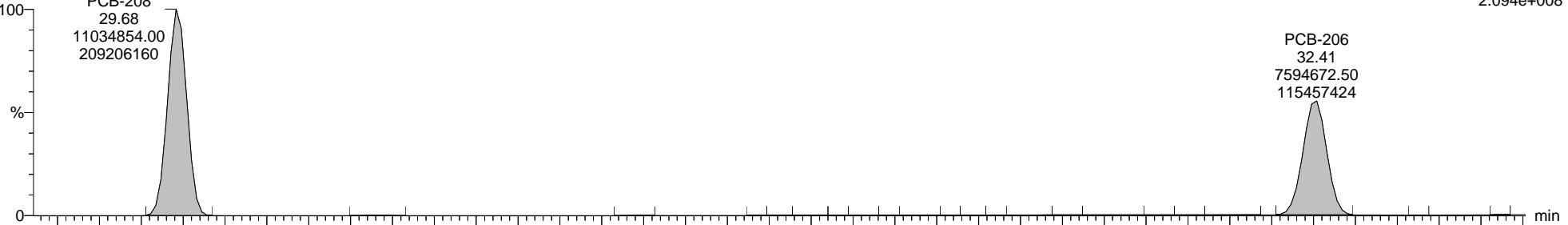
Name: 5-150917B03, Date: 17-Sep-2015, Time: 16:46:19, ID: H5-15-CS5-011, Description: 1668A-CS#5-015, Vial: Tray1:7

**PCB-208**

5-150917B03 Smooth(Mn,1x1)

1668A-CS#5-015 H5-15-CS5-011

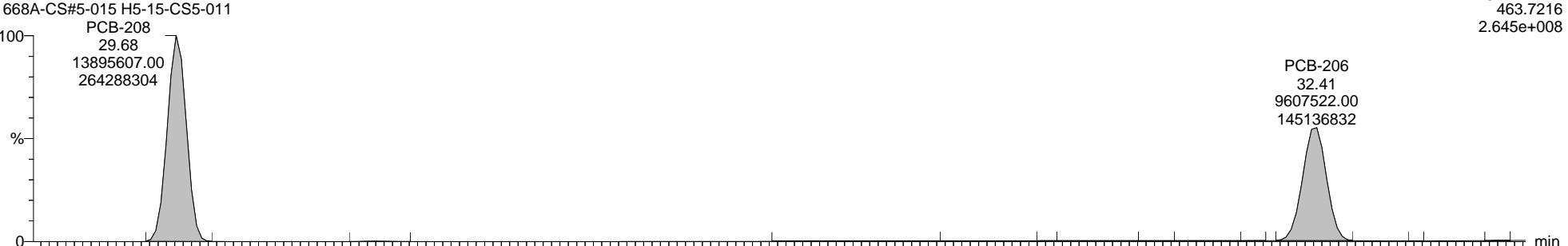
PCB-208

29.68  
11034854.00  
209206160F6:Voltage SIR,EI+  
461.7246  
2.094e+008

5-150917B03 Smooth(Mn,1x1)

1668A-CS#5-015 H5-15-CS5-011

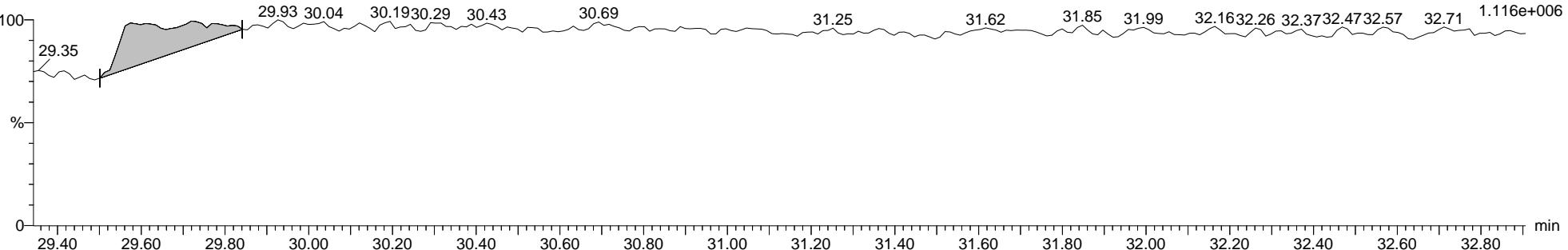
PCB-208

29.68  
13895607.00  
264288304F6:Voltage SIR,EI+  
463.7216  
2.645e+008

5-150917B03 Smooth(Mn,1x1)

1668A-CS#5-015 H5-15-CS5-011

PCB-208

29.35  
29.93 30.04  
30.19 30.29  
30.43  
30.69  
31.25  
31.62  
31.85  
31.99  
32.16 32.26  
32.37 32.47 32.57  
32.71F6:Voltage SIR,EI+  
454.9728  
1.116e+006

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

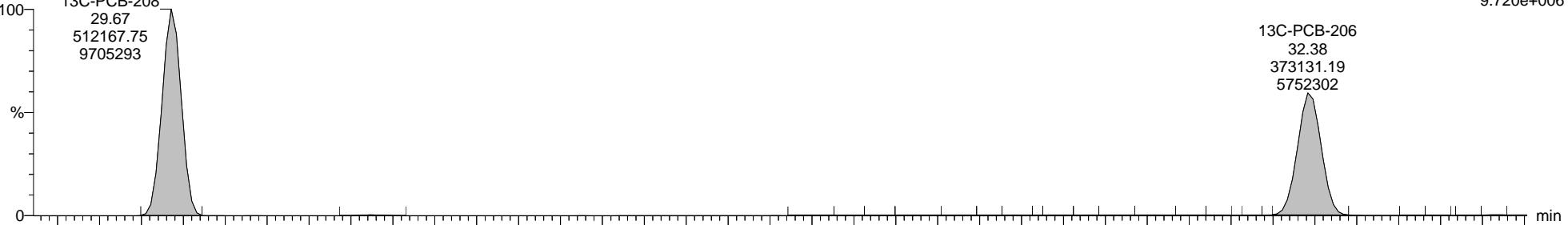
Name: 5-150917B03, Date: 17-Sep-2015, Time: 16:46:19, ID: H5-15-CS5-011, Description: 1668A-CS#5-015, Vial: Tray1:7

**13C-PCB-208**

5-150917B03 Smooth(Mn,1x1)

1668A-CS#5-015 H5-15-CS5-011

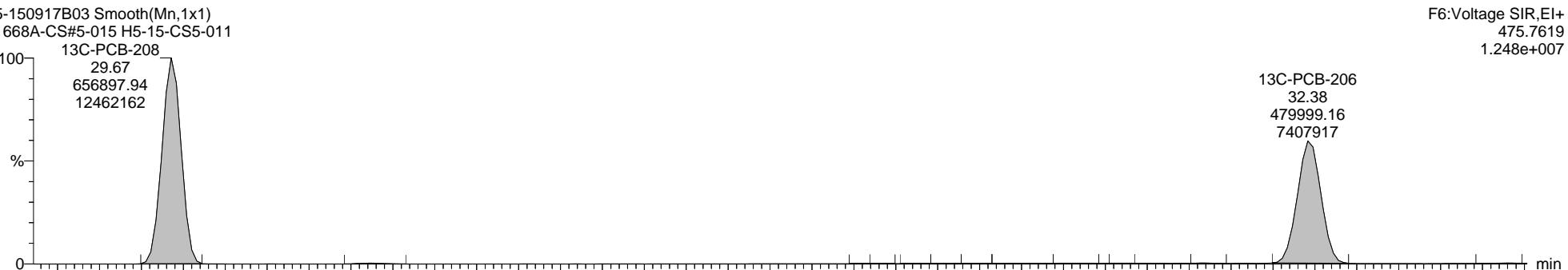
13C-PCB-208

29.67  
512167.75  
9705293

5-150917B03 Smooth(Mn,1x1)

1668A-CS#5-015 H5-15-CS5-011

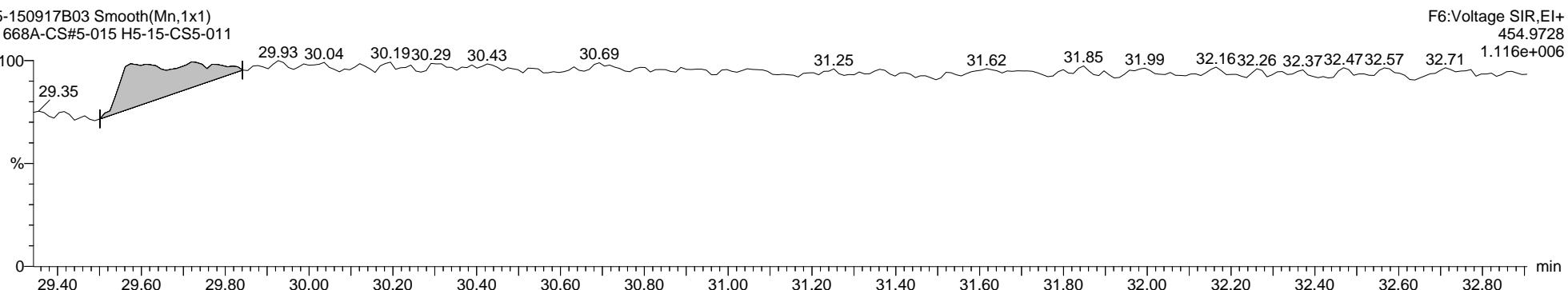
13C-PCB-208

29.67  
656897.94  
12462162

5-150917B03 Smooth(Mn,1x1)

1668A-CS#5-015 H5-15-CS5-011

13C-PCB-208

29.35  
29.93 30.04  
30.19 30.29  
30.43  
30.69  
31.25  
31.62  
31.85  
31.99  
32.16 32.26  
32.37 32.47 32.57  
32.71

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Name: 5-150917B03, Date: 17-Sep-2015, Time: 16:46:19, ID: H5-15-CS5-011, Description: 1668A-CS#5-015, Vial: Tray1:7

**PCB-209**

5-150917B03 Smooth(Mn,1x1)

1668A-CS#5-015 H5-15-CS5-011

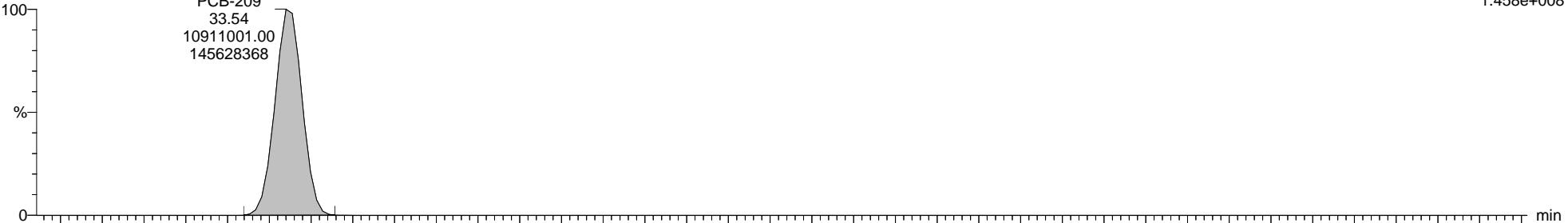
PCB-209

33.54  
10911001.00  
145628368

F7:Voltage SIR,EI+

497.6826

1.458e+008



5-150917B03 Smooth(Mn,1x1)

1668A-CS#5-015 H5-15-CS5-011

PCB-209

33.54  
9225856.00  
124573264

F7:Voltage SIR,EI+

499.6797

1.247e+008



5-150917B03 Smooth(Mn,1x1)

1668A-CS#5-015 H5-15-CS5-011

33.04

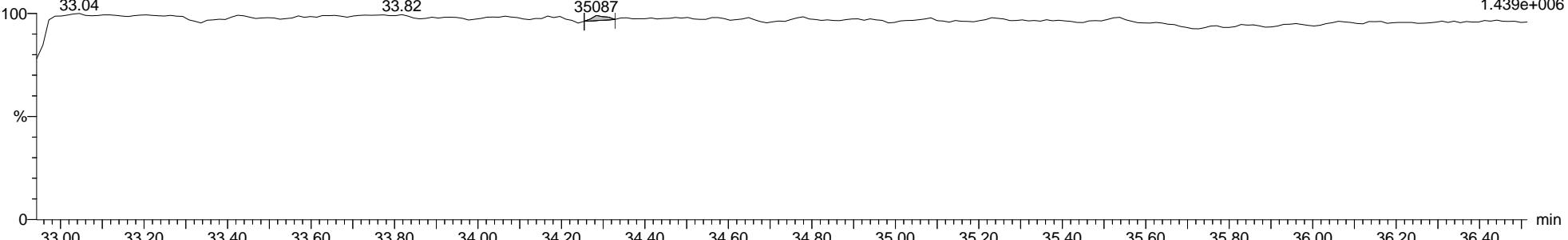
33.82

34.28  
1297.23  
35087

F7:Voltage SIR,EI+

516.9697

1.439e+006



Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Name: 5-150917B03, Date: 17-Sep-2015, Time: 16:46:19, ID: H5-15-CS5-011, Description: 1668A-CS#5-015, Vial: Tray1:7

**13C-PCB-209**

5-150917B03 Smooth(Mn,1x1)

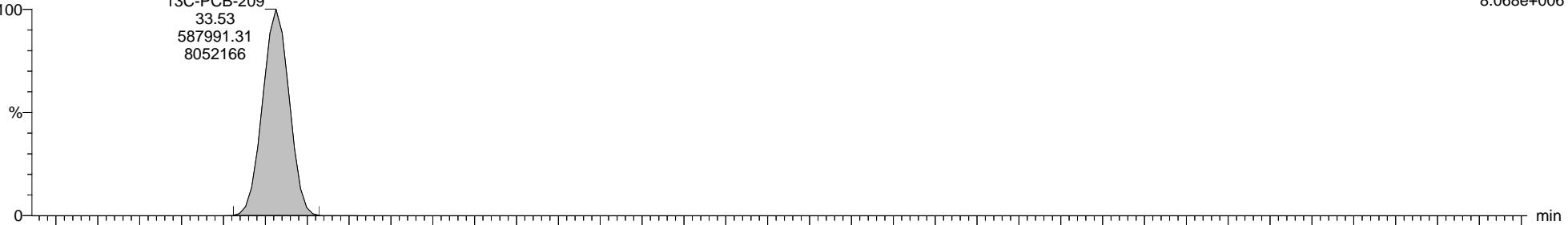
1668A-CS#5-015 H5-15-CS5-011

13C-PCB-209

33.53

587991.31

8052166



5-150917B03 Smooth(Mn,1x1)

1668A-CS#5-015 H5-15-CS5-011

13C-PCB-209

33.53

496258.50

6797945



5-150917B03 Smooth(Mn,1x1)

1668A-CS#5-015 H5-15-CS5-011

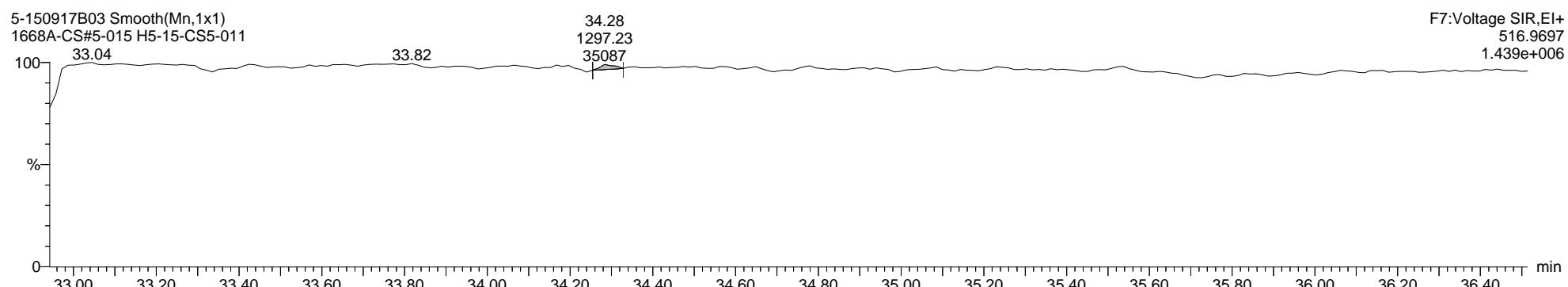
33.04

33.82

34.28

1297.23

35087



**Quantify Audit Report MassLynx MassLynx V4.1 SCN 901**

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld

Last Altered: Wednesday, November 11, 2015 18:43:37 Eastern Standard Time

Printed: Monday, November 30, 2015 15:29:07 Eastern Standard Time

Date	Time	Event	Details	Comments
11-Nov-15	18:42:23	Process Extract		
11-Nov-15	18:42:23	Process Integrate		
11-Nov-15	18:42:23	Process Calibrate		
11-Nov-15	18:42:24	Process Quantify		
11-Nov-15	18:42:25	Dataset Created		
11-Nov-15	18:42:48	Pre modification peak	Sample:5-150917B01, Compound:MoCB-F1, RT:10.403	
11-Nov-15	18:42:48	Peak modified	Sample:5-150917B01, Compound:MoCB-F1, RT:10.403	
11-Nov-15	18:43:36	Pre modification peak	Sample:5-150917B01, Compound:TeCB-F4, RT:22.088	
11-Nov-15	18:43:36	Peak modified	Sample:5-150917B01, Compound:TeCB-F4, RT:22.088	
11-Nov-15	18:43:36	Pre modification peak	Sample:5-150917B01, Compound:TeCB-F4, RT:22.088	
11-Nov-15	18:43:36	Peak modified	Sample:5-150917B01, Compound:TeCB-F4, RT:22.088	
11-Nov-15	18:48:11	Calibration Saved	Saved to 'C:\MassLynx\PCB.PRO\CurveDB\5-150917B-CAL5-16...	
11-Nov-15	18:49:08	Dataset Saved	Saved to 'C:\MassLynx\PCB.PRO\Results\5-150917B-ICAL.qld'	

## Quantify Sample Summary Report

## MassLynx MassLynx V4.1 SCN 901

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-Q1.qld

Last Altered: Wednesday, November 11, 2015 20:13:55 Eastern Standard Time

Printed: Monday, November 30, 2015 16:17:54 Eastern Standard Time

**Method: C:\MassLynx\PCB.PRO\MethDB\1668-OCTYL-1-209CAL-150917.mdb 11 Nov 2015 19:19:38****Calibration: 11 Nov 2015 20:13:55****Name: 5-150917B08, Date: 17-Sep-2015, Time: 20:03:57, ID: H5-15-WDM-214, Description: 1668A-CS#6-015B, Vial: Tray1:1**

	# Target Analyte	#Hom	Resp	Ion 1 Area	Ion 2 Area	Ra	Ra Fail=YES	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.	Comment	Noise 1	Noise 2
1	1 * PCB-1		49	392770	706301	3.12	NO	8.84	1.00	8.81	8.87	57.032	114.1			739	538
2	2 PCB-2		48	359672		3.16	NO	10.26	0.99	10.22	10.29	50.000	100.0			739	538
3	3 PCB-3		52	373528		3.11	NO	10.38	1.00	10.34	10.41	55.863	111.7			739	538
4	4 * PCB-4		56	361145		1.60	NO	10.55	1.00	10.52	10.58	56.524	113.0			894	3033
5	5 PCB-10		66	547616		1.60	NO	10.67	1.01	10.64	10.71	50.000	100.0			894	3033
6	6 PCB-9		65	554195		1.55	NO	11.83	1.12	11.80	11.86	50.000	100.0			894	3033
7	7 PCB-7		65	549329		1.55	NO	11.94	1.13	11.91	11.98	50.000	100.0			894	3033
8	8 PCB-6		68	574422		1.56	NO	12.09	1.15	12.06	12.12	50.000	100.0			894	3033
9	9 PCB-5		61	518540		1.55	NO	12.30	1.17	12.27	12.33	50.000	100.0			894	3033
10	10 PCB-8		67	566713		1.57	NO	12.37	1.17	12.34	12.41	50.000	100.0			894	3033
11	11 * PCB-14		67	572318		1.55	NO	13.36	0.94	13.33	13.40	50.000	100.0			1496	3143
12	12 PCB-11		61	520373		1.52	NO	13.87	0.97	13.83	13.90	50.000	100.0			1496	3143
13	13 PCB-13/12		130	1100959		1.55	NO	14.07	0.99	14.03	14.10	100.000	100.0			1496	3143
14	14 PCB-15		55	574633		1.52	NO	14.24	1.00	14.21	14.28	57.566	115.1			1496	3143
15	15 * PCB-19		58	310256		1.08	NO	12.57	1.00	12.54	12.60	56.675	113.3			534	388
16	16 * PCB-30/18		113	965499		1.08	NO	13.68	1.09	13.64	13.71	100.000	100.0			626	562
17	17 PCB-17		46	389230		1.07	NO	13.94	1.11	13.90	13.97	50.000	100.0			626	562
18	18 PCB-27		71	608825		1.07	NO	14.06	1.12	14.03	14.09	50.000	100.0			626	562
19	19 PCB-24		67	568487		1.08	NO	14.15	1.13	14.12	14.19	50.000	100.0			626	562
20	20 PCB-16		37	316514		1.08	NO	14.22	1.13	14.18	14.25	50.000	100.0			626	562
21	21 PCB-32		70	593505		1.08	NO	14.51	1.16	14.48	14.55	50.000	100.0			626	562
22	22 * PCB-34		73	640032		1.02	NO	15.23	1.21	15.19	15.26	50.000	100.0			1246	1738
23	23 PCB-23		74	649319		1.02	NO	15.32	1.22	15.29	15.35	50.000	100.0			1246	1738
24	24 PCB-29/26		123	1069721		1.03	NO	15.50	1.23	15.47	15.53	100.000	100.0			1246	1738
25	25 PCB-25		79	692655		1.02	NO	15.62	0.86	15.59	15.65	50.000	100.0			1246	1738
26	26 PCB-31		72	627896		1.03	NO	15.80	0.87	15.76	15.83	50.000	100.0			1246	1738
27	27 PCB-28/20		144	1261815		1.02	NO	15.99	0.88	15.95	16.02	100.000	100.0			1246	1738
28	28 PCB-21/33		151	1324769		1.02	NO	16.10	0.89	16.06	16.13	100.000	100.0			1246	1738
29	29 PCB-22		73	639420		1.02	NO	16.34	0.90	16.31	16.38	50.000	100.0			1246	1738
30	30 PCB-36		83	717282		1.04	NO	17.18	0.94	17.14	17.21	50.000	100.0			1246	1738
31	31 PCB-39		68	599008		1.02	NO	17.38	0.96	17.35	17.41	50.000	100.0			1246	1738
32	32 PCB-38		83	718425		1.03	NO	17.72	0.97	17.69	17.75	50.000	100.0			1246	1738
33	33 PCB-35		73	635527		1.03	NO	17.96	0.99	17.93	18.00	50.000	100.0			1246	1738
34	34 PCB-37		54	641466		1.03	NO	18.20	1.00	18.16	18.23	57.323	114.6			1246	1738

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-Q1.qld

Last Altered: Wednesday, November 11, 2015 20:13:55 Eastern Standard Time

Printed: Monday, November 30, 2015 16:17:54 Eastern Standard Time

Name: 5-150917B08, Date: 17-Sep-2015, Time: 20:03:57, ID: H5-15-WDM-214, Description: 1668A-CS#6-015B, Vial: Tray1:1

	# Target Analyte	#Hom	Resp	Ion 1 Area	Ion 2 Area	Ra	Ra Fail=YES	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.	Comment	Noise 1	Noise 2
35	35 * PCB-54		116	1003278		0.80	NO	14.43	1.00	14.40	14.47	116.107	116.1			489	1129
36	36 * PCB-50/53		161	1805767		0.79	NO	15.66	1.09	15.62	15.69	200.000	100.0			1103	1009
37	37 PCB-45/51		154	1729325		0.80	NO	16.07	1.11	16.04	16.10	200.000	100.0			1103	1009
38	38 PCB-46		69	773956		0.79	NO	16.22	1.12	16.19	16.25	100.000	100.0			1103	1009
39	39 PCB-52		80	900184		0.79	NO	16.98	1.18	16.95	17.01	100.000	100.0			1103	1009
40	40 PCB-73		125	1396967		0.80	NO	17.05	1.18	17.02	17.09	100.000	100.0			1103	1009
41	41 PCB-43		72	802235		0.80	NO	17.12	1.19	17.09	17.15	100.000	100.0			1103	1009
42	42 PCB-69/49		197	2203922		0.79	NO	17.23	1.19	17.20	17.27	200.000	100.0			1103	1009
43	43 PCB-48		81	902645		0.79	NO	17.41	1.21	17.38	17.44	100.000	100.0			1103	1009
44	44 PCB-44/47/65		288	3235304		0.79	NO	17.56	1.22	17.53	17.59	300.000	100.0			1103	1009
45	45 PCB-59/62/75		356	3985432		0.79	NO	17.72	1.23	17.69	17.75	300.000	100.0			1103	1009
46	46 PCB-42		80	898253		0.80	NO	17.83	1.24	17.80	17.86	100.000	100.0			1103	1009
47	47 PCB-41/71/40		251	2809284		0.79	NO	18.10	1.25	18.07	18.14	300.000	100.0			1103	1009
48	48 PCB-64		123	1382137		0.79	NO	18.22	1.26	18.19	18.26	100.000	100.0			1103	1009
49	49 * PCB-72		113	1278351		0.77	NO	18.64	0.86	18.60	18.67	100.000	100.0			3291	3733
50	50 PCB-68		131	1480903		0.78	NO	18.80	0.86	18.76	18.83	100.000	100.0			3291	3733
51	51 PCB-57		112	1269491		0.77	NO	19.03	0.87	19.00	19.07	100.000	100.0			3291	3733
52	52 PCB-58		115	1304532		0.77	NO	19.16	0.88	19.12	19.19	100.000	100.0			3291	3733
53	53 PCB-67		141	1602686		0.77	NO	19.25	0.88	19.22	19.29	100.000	100.0			3291	3733
54	54 PCB-63		124	1404543		0.78	NO	19.40	0.89	19.36	19.43	100.000	100.0			3291	3733
55	55 PCB-61/70/74/76		472	5342152		0.78	NO	19.57	0.90	19.54	19.61	400.000	100.0			3291	3733
56	56 PCB-66		118	1339827		0.78	NO	19.76	0.91	19.72	19.79	100.000	100.0			3291	3733
57	57 PCB-55		108	1221962		0.77	NO	19.85	0.91	19.82	19.89	100.000	100.0			3291	3733
58	58 PCB-56		122	1381445		0.78	NO	20.12	0.92	20.09	20.15	100.000	100.0			3291	3733
59	59 PCB-60		118	1340169		0.77	NO	20.24	0.93	20.21	20.28	100.000	100.0			3291	3733
60	60 PCB-80		125	1412411		0.79	NO	20.40	0.94	20.37	20.44	100.000	100.0			3291	3733
61	61 PCB-79		137	1563432		0.77	NO	21.23	0.98	21.20	21.27	100.000	100.0			3291	3733
62	62 PCB-78		117	1324664		0.78	NO	21.54	0.99	21.51	21.57	100.000	100.0			3291	3733
63	63 PCB-81		112	1342631		0.79	NO	21.78	1.00	21.75	21.81	108.813	108.8			3291	3733
64	64 PCB-77		110	1431855		0.78	NO	22.07	1.00	22.04	22.10	108.707	108.7			3291	3733
65	65 * PCB-104		122	730046		1.58	NO	17.52	1.00	17.49	17.56	106.977	107.0			425	435
66	66 PCB-96		99	678692		1.59	NO	17.74	1.01	17.70	17.77	100.000	100.0			425	435
67	67 * PCB-103		78	535100		1.61	NO	18.74	1.07	18.71	18.78	100.000	100.0			1119	2106
68	68 PCB-94		68	465794		1.61	NO	18.87	1.08	18.84	18.91	100.000	100.0			1119	2106
69	69 PCB-95		75	513004	2321	1.60	NO	19.11	1.09	19.08	19.15	100.000	100.0			1119	2106
70	70 PCB-100/93/102/98		319	2183694		1.60	NO	19.24	1.10	19.20	19.27	400.000	100.0			1119	2106
71	71 PCB-88/91		153	1053818		1.59	NO	19.57	1.12	19.54	19.61	200.000	100.0			1119	2106
72	72 PCB-84		68	466345		1.61	NO	19.71	1.13	19.68	19.75	100.000	100.0			1119	2106

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-Q1.qld

Last Altered: Wednesday, November 11, 2015 20:13:55 Eastern Standard Time

Printed: Monday, November 30, 2015 16:17:54 Eastern Standard Time

Name: 5-150917B08, Date: 17-Sep-2015, Time: 20:03:57, ID: H5-15-WDM-214, Description: 1668A-CS#6-015B, Vial: Tray1:1

	# Target Analyte	#Hom	Resp	Ion 1 Area	Ion 2 Area	Ra	Ra Fail=YES	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.	Comment	Noise 1	Noise 2
73	73 PCB-89		74	505238		1.61	NO	19.97	1.14	19.94	20.00	100.000	100.0			1119	2106
74	74 PCB-121		117	796914		1.61	NO	20.13	1.15	20.09	20.16	100.000	100.0			1119	2106
75	75 PCB-92		74	505835		1.61	NO	20.34	1.16	20.31	20.37	100.000	100.0			1119	2106
76	76 PCB-113/90/101		263	1806643		1.59	NO	20.65	1.18	20.62	20.68	300.000	100.0			1119	2106
77	77 PCB-83/99		162	1112256		1.59	NO	20.97	1.20	20.93	21.00	200.000	100.0			1119	2106
78	78 PCB-112		104	711630		1.60	NO	21.04	1.20	21.00	21.07	100.000	100.0			1119	2106
79	79 PCB-108/119/86/97/125/87		553	3793949		1.59	NO	21.23	1.21	21.20	21.27	600.000	100.0			1119	2106
80	80 PCB-117/116/85/110/115		505	3451480		1.60	NO	21.65	1.24	21.61	21.68	500.000	100.0			1119	2106
81	81 PCB-82		66	452632		1.58	NO	21.89	1.25	21.86	21.93	100.000	100.0			1119	2106
82	82 PCB-111		113	773694		1.61	NO	22.04	1.26	22.01	22.08	100.000	100.0			1119	2106
83	83 PCB-120		112	761855		1.61	NO	22.29	1.27	22.26	22.32	100.000	100.0			1119	2106
84	84 * PCB-107/124		225	1562017		1.57	NO	22.91	1.31	22.87	22.94	200.000	100.0			4141	2784
85	85 PCB-109		119	826725		1.56	NO	23.03	1.32	23.00	23.07	100.000	100.0			4141	2784
86	86 PCB-123		111	788428		1.57	NO	23.09	1.00	23.06	23.12	119.479	119.5			4141	2784
87	87 PCB-106		120	825369		1.58	NO	23.17	1.00	23.14	23.20	100.000	100.0			4141	2784
88	88 PCB-118		114	853998		1.56	NO	23.26	1.00	23.23	23.30	116.305	116.3			4141	2784
89	89 PCB-122		108	745327		1.57	NO	23.45	1.01	23.42	23.48	100.000	100.0			4141	2784
90	90 PCB-114		117	824325		1.58	NO	23.55	1.00	23.52	23.59	115.587	115.6			4141	2784
91	91 PCB-105		114	823235		1.55	NO	23.89	1.00	23.86	23.92	116.641	116.6			4141	2784
92	92 PCB-127		126	876229		1.57	NO	24.62	1.03	24.59	24.65	100.000	100.0			4141	2784
93	93 PCB-126		116	824509	8504	1.59	NO	25.48	1.00	25.44	25.51	116.402	116.4			4141	2784
94	94 * PCB-155		113	870799		1.27	NO	20.54	1.00	20.51	20.58	110.563	110.6			483	516
95	95 PCB-152		108	769985		1.26	NO	20.68	1.01	20.64	20.71	100.000	100.0			483	516
96	96 PCB-150		115	812688		1.27	NO	20.75	1.01	20.71	20.78	100.000	100.0			483	516
97	97 PCB-136		108	766030		1.26	NO	20.96	1.02	20.92	20.99	100.000	100.0			483	516
98	98 PCB-145		103	726458		1.28	NO	21.11	1.03	21.07	21.14	100.000	100.0			483	516
99	99 PCB-148		79	561382		1.27	NO	21.85	1.06	21.82	21.88	100.000	100.0			483	516
100	1... PCB-151/135		166	1178909		1.26	NO	22.19	1.08	22.16	22.23	200.000	100.0			483	516
101	1... PCB-154		90	637340		1.27	NO	22.30	1.09	22.27	22.33	100.000	100.0			483	516
102	1... PCB-144		83	581912		1.28	NO	22.48	1.10	22.44	22.51	100.000	100.0			483	516
103	1... * PCB-147/149		193	1388346		1.24	NO	22.67	1.10	22.64	22.71	200.000	100.0			6784	4460
104	1... PCB-134/143		169	1199789		1.26	NO	22.82	1.11	22.79	22.86	200.000	100.0			6784	4460
105	1... PCB-139/140		190	1351533		1.26	NO	22.99	1.12	22.95	23.02	200.000	100.0			6784	4460
106	1... PCB-131		83	591397		1.25	NO	23.10	1.13	23.07	23.14	100.000	100.0			6784	4460
107	1... PCB-142		84	591927		1.27	NO	23.19	1.13	23.16	23.23	100.000	100.0			6784	4460
108	1... PCB-132		89	633741		1.26	NO	23.35	1.14	23.31	23.38	100.000	100.0			6784	4460
109	1... PCB-133		88	625524		1.27	NO	23.55	1.15	23.52	23.59	100.000	100.0			6784	4460
110	1... PCB-165		113	804105	17480	1.26	NO	23.76	0.90	23.73	23.80	100.000	100.0			6784	4460

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-Q1.qld

Last Altered: Wednesday, November 11, 2015 20:13:55 Eastern Standard Time

Printed: Monday, November 30, 2015 16:17:54 Eastern Standard Time

Name: 5-150917B08, Date: 17-Sep-2015, Time: 20:03:57, ID: H5-15-WDM-214, Description: 1668A-CS#6-015B, Vial: Tray1:1

	# Target Analyte	#Hom	Resp	Ion 1 Area	Ion 2 Area	Ra	Ra Fail=YES	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.	Comment	Noise 1	Noise 2
111	111 PCB-146		108	769454		1.25	NO	23.89	0.91	23.86	23.92	100.000	100.0			6784	4460
112	1... PCB-161		118	836813		1.26	NO	23.96	0.91	23.93	23.99	100.000	100.0			6784	4460
113	1... PCB-153/168		232	1648094		1.26	NO	24.23	0.92	24.19	24.26	200.000	100.0			6784	4460
114	1... PCB-141		86	610449		1.26	NO	24.33	0.92	24.30	24.36	100.000	100.0			6784	4460
115	1... PCB-130		78	556075		1.25	NO	24.54	0.93	24.50	24.57	100.000	100.0			6784	4460
116	1... PCB-137/164		211	1502390		1.26	NO	24.70	0.94	24.67	24.73	200.000	100.0			6784	4460
117	1... PCB-138/163/129		296	2107328	9940	1.25	NO	24.87	0.94	24.84	24.91	300.000	100.0			6784	4460
118	1... PCB-160		119	848105		1.26	NO	24.98	0.95	24.94	25.01	100.000	100.0			6784	4460
119	1... PCB-158		131	927440		1.26	NO	25.08	0.95	25.05	25.12	100.000	100.0			6784	4460
120	1... PCB-128/166		208	1482370	8504	1.25	NO	25.55	0.97	25.51	25.58	200.000	100.0			6784	4460
121	1... PCB-159		127	904054		1.25	NO	26.01	0.99	25.98	26.04	100.000	100.0			6784	4460
122	1... PCB-162		127	898228		1.26	NO	26.15	0.99	26.11	26.18	100.000	100.0			6784	4460
123	1... PCB-167		131	889087		1.26	NO	26.40	1.00	26.37	26.44	111.544	111.5			6784	4460
124	1... PCB-156/157		253	1735711		1.26	NO	27.02	1.00	26.98	27.05	224.634	112.3			6784	4460
125	1... PCB-169		124	859579		1.28	NO	28.66	1.00	28.63	28.69	116.264	116.3			6784	4460
126	1... * PCB-188		103	844865		1.04	NO	23.53	1.00	23.50	23.56	107.189	107.2			3466	2882
127	1... PCB-179		95	781083	17480	1.05	NO	23.72	1.01	23.68	23.75	100.000	100.0			3466	2882
128	1... PCB-184		108	886284		1.05	NO	23.98	1.02	23.95	24.02	100.000	100.0			3466	2882
129	1... PCB-176		98	807083		1.04	NO	24.18	1.03	24.15	24.21	100.000	100.0			3466	2882
130	1... PCB-186		94	770925		1.04	NO	24.43	1.04	24.40	24.47	100.000	100.0			3466	2882
131	1... PCB-178		70	575563		1.05	NO	25.08	1.07	25.05	25.12	100.000	100.0			3466	2882
132	1... PCB-175		74	609360		1.05	NO	25.42	1.08	25.38	25.45	100.000	100.0			3466	2882
133	1... PCB-187		87	719271	8504	1.03	NO	25.56	1.09	25.52	25.59	100.000	100.0			3466	2882
134	1... PCB-182		76	625329		1.05	NO	25.66	1.09	25.63	25.69	100.000	100.0			3466	2882
135	1... PCB-183		76	632530		1.03	NO	25.87	1.10	25.84	25.90	100.000	100.0			3466	2882
136	1... PCB-185		72	586968		1.05	NO	25.94	1.10	25.91	25.97	100.000	100.0			3466	2882
137	1... PCB-174		68	554579		1.06	NO	26.01	1.11	25.98	26.04	100.000	100.0			3466	2882
138	1... PCB-177		70	570607		1.05	NO	26.24	1.12	26.21	26.27	100.000	100.0			3466	2882
139	1... PCB-181		73	604530		1.04	NO	26.45	1.13	26.42	26.48	100.000	100.0			3466	2882
140	1... PCB-171/173		131	1078166		1.05	NO	26.56	1.13	26.53	26.60	200.000	100.0			3466	2882
141	1... PCB-172		71	581173		1.04	NO	27.36	0.91	27.33	27.40	100.000	100.0			3466	2882
142	1... PCB-192		84	686091		1.05	NO	27.51	0.92	27.48	27.55	100.000	100.0			3466	2882
143	1... PCB-180/193		168	1385384		1.04	NO	27.68	0.92	27.64	27.71	200.000	100.0			3466	2882
144	1... PCB-191		93	766533		1.05	NO	27.87	0.93	27.84	27.91	100.000	100.0			3466	2882
145	1... PCB-170		66	546794		1.04	NO	28.36	0.95	28.33	28.39	100.000	100.0			3466	2882
146	1... PCB-190		100	823143		1.04	NO	28.64	0.96	28.60	28.67	100.000	100.0			3466	2882
147	1... * PCB-189		101	840359		1.02	NO	29.94	1.00	29.91	29.97	117.070	117.1			3548	3849
148	1... * PCB-202		172	1039895		0.91	NO	26.29	1.00	26.25	26.32	171.516	114.3			731	959

## Quantify Sample Summary Report

## MassLynx MassLynx V4.1 SCN 901

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-Q1.qld

Last Altered: Wednesday, November 11, 2015 20:13:55 Eastern Standard Time

Printed: Monday, November 30, 2015 16:17:54 Eastern Standard Time

Name: 5-150917B08, Date: 17-Sep-2015, Time: 20:03:57, ID: H5-15-WDM-214, Description: 1668A-CS#6-015B, Vial: Tray1:1

	# Target Analyte	#Hom	Resp	Ion 1 Area	Ion 2 Area	Ra	Ra Fail=YES	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.	Comment	Noise 1	Noise 2
149	1... PCB-201		142	972592		0.91	NO	26.76	1.02	26.73	26.79	150.000	100.0			731	959
150	1... PCB-204		154	1049460		0.92	NO	27.11	1.03	27.08	27.14	150.000	100.0			731	959
151	1... PCB-197		148	1002912		0.92	NO	27.22	1.04	27.19	27.26	150.000	100.0			731	959
152	1... PCB-200		143	968789		0.92	NO	27.29	1.04	27.26	27.33	150.000	100.0			731	959
153	1... PCB-198/199		207	1409378		0.91	NO	28.68	1.09	28.65	28.72	300.000	100.0			731	959
154	1... PCB-196		101	688727		0.92	NO	29.03	0.93	29.00	29.06	150.000	100.0			731	959
155	1... PCB-203		107	735145		0.91	NO	29.14	0.93	29.10	29.17	150.000	100.0			731	959
156	1... * PCB-195		124	850428		0.90	NO	29.84	0.95	29.81	29.87	150.000	100.0			4183	5183
157	1... PCB-194		131	901457		0.90	NO	31.06	0.99	31.02	31.09	150.000	100.0			4183	5183
158	1... PCB-205		136	1038219		0.90	NO	31.33	1.00	31.29	31.36	165.257	110.2			4183	5183
159	1... * PCB-208		157	972683	15394	0.79	NO	29.70	1.00	29.66	29.73	168.439	112.3			1901	2311
160	1... PCB-207		179	956226		0.80	NO	30.17	1.02	30.14	30.20	150.000	100.0			1901	2311
161	1... PCB-206		147	662924		0.80	NO	32.42	1.00	32.39	32.45	169.915	113.3			1901	2311
162	1... * PCB-209		151	751780		1.18	NO	33.56	1.00	33.52	33.59	186.183	124.1			149	322
163	1... 13C-PCB-31		125	1070672		1.06	NO	15.79	1.26	15.76	15.82	100.122	100.1			36777	10090
164	1... 13C-PCB-95		67	464511	2321	1.58	NO	19.10	1.09	19.07	19.14	98.061	98.1			932	795
165	1... 13C-PCB-153		85	595670		1.30	NO	24.19	0.92	24.16	24.22	97.477	97.5			2342	1590
166	1... 13C-PCB-28		167	1078568		1.05	NO	15.96	0.94	15.92	15.99	93.554	93.6			36777	10090
167	1... 13C-PCB-111		128	660194		1.58	NO	22.03	1.07	21.99	22.06	97.154	97.2			932	795
168	1... 13C-PCB-178		78	492268		1.06	NO	25.07	1.01	25.04	25.10	92.701	92.7			2294	1378
169	1... 13C-PCB-1		125	796862	706301	3.12	NO	8.84	0.75	8.81	8.87	101.511	101.5			1125	7399
170	1... 13C-PCB-3		112	723328		3.08	NO	10.38	0.88	10.34	10.41	100.444	100.4			1125	7399
171	1... 13C-PCB-4		64	646216		1.61	NO	10.54	0.89	10.50	10.57	98.616	98.6			15023	2416
172	1... 13C-PCB-15		100	1026271		1.57	NO	14.23	1.20	14.20	14.27	100.758	100.8			28176	4966
173	1... 13C-PCB-19		43	538204		1.08	NO	12.56	1.06	12.52	12.59	95.420	95.4			23311	12705
174	1... 13C-PCB-37		183	1174343		1.06	NO	18.19	1.07	18.15	18.22	100.297	100.3			36777	10090
175	1... 13C-PCB-54		118	864972		0.81	NO	14.42	0.85	14.39	14.46	94.758	94.8			2322	1421
176	1... 13C-PCB-81		161	1197943		0.79	NO	21.77	1.05	21.74	21.80	98.843	98.8			2473	1833
177	1... 13C-PCB-77		175	1304675		0.78	NO	22.06	1.07	22.03	22.10	98.082	98.1			2473	1833
178	1... 13C-PCB-104		117	594538		1.61	NO	17.51	0.85	17.48	17.55	94.614	94.6			413	458
179	1... 13C-PCB-123		137	707003		1.58	NO	23.08	1.12	23.05	23.11	98.802	98.8			3430	2476
180	1... 13C-PCB-118		145	748213		1.57	NO	23.25	1.13	23.22	23.29	98.804	98.8			3430	2476
181	1... 13C-PCB-114		137	699326		1.60	NO	23.54	1.14	23.51	23.58	98.870	98.9			3430	2476
182	1... 13C-PCB-105		138	714307		1.57	NO	23.88	1.16	23.84	23.91	97.822	97.8			3430	2476
183	1... 13C-PCB-126		138	711491	8504	1.58	NO	25.46	1.23	25.43	25.50	96.674	96.7			3430	2476
184	1... 13C-PCB-155		132	771770		1.27	NO	20.53	0.99	20.49	20.56	96.828	96.8			552	441
185	1... 13C-PCB-167		118	671302		1.29	NO	26.39	1.06	26.36	26.42	97.676	97.7			2342	1590
186	1... 13C-PCB-156/157		238	1355751		1.28	NO	27.00	1.09	26.97	27.04	192.533	96.3			2342	1590

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-Q1.qld

Last Altered: Wednesday, November 11, 2015 20:13:55 Eastern Standard Time

Printed: Monday, November 30, 2015 16:17:54 Eastern Standard Time

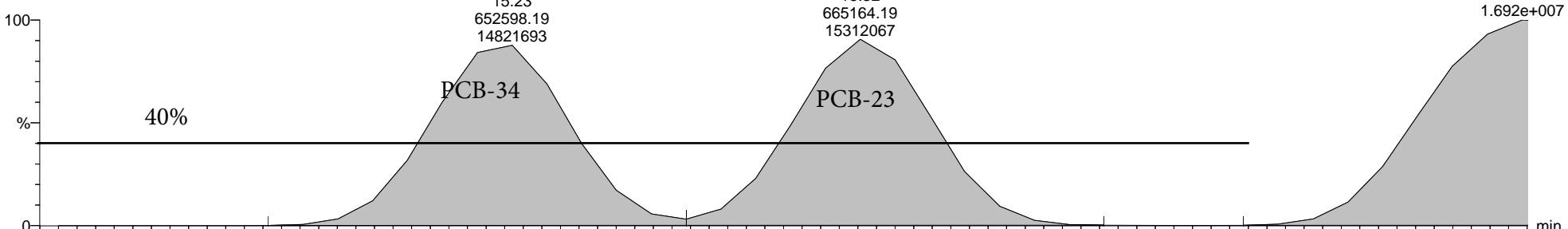
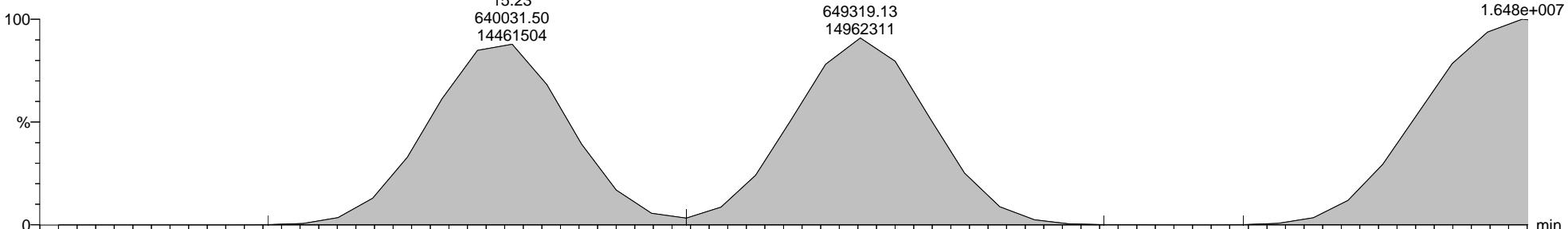
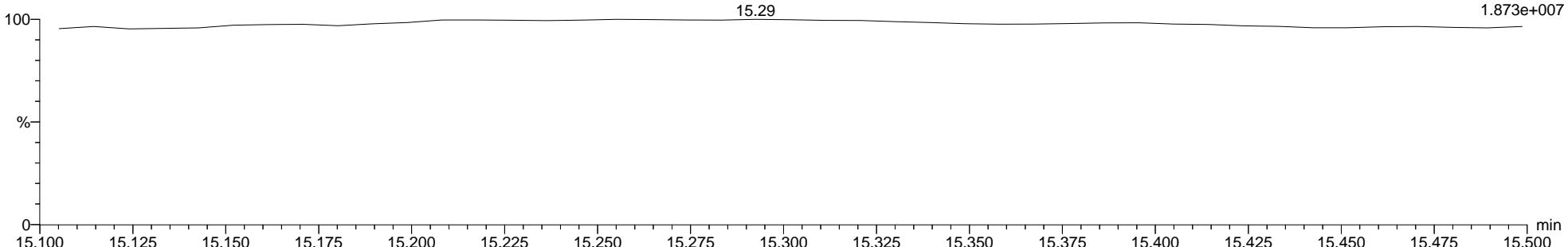
**Name: 5-150917B08, Date: 17-Sep-2015, Time: 20:03:57, ID: H5-15-WDM-214, Description: 1668A-CS#6-015B, Vial: Tray1:1**

	# Target Analyte	#Hom	Resp	Ion 1 Area	Ion 2 Area	Ra	Ra Fail=YES	RT	RRT	RT LCL	RT UCL	Conc.	%Rec	Mod.	Comment	Noise 1	Noise 2
187	1... 13C-PCB-169		122	692227		1.29		NO	28.65	1.15	28.62	28.68	96.725	96.7		2342	1590
188	1... 13C-PCB-188		129	814145		1.07		NO	23.51	0.95	23.47	23.54	99.399	99.4		2294	1378
189	1... 13C-PCB-189		129	812596		1.07		NO	29.93	1.20	29.89	29.96	98.215	98.2		2815	4403
190	1... 13C-PCB-202		89	598687		0.93		NO	26.27	1.06	26.24	26.31	94.746	94.7		1153	1600
191	1... 13C-PCB-205		137	760970		0.91		NO	31.31	1.01	31.28	31.35	98.025	98.0		2942	3173
192	1... 13C-PCB-208		104	624032	15394	0.77		NO	29.68	0.96	29.65	29.72	94.390	94.4		2009	2476
193	1... 13C-PCB-206		77	454626		0.79		NO	32.40	1.04	32.36	32.43	96.260	96.3		2009	2476
194	1... 13C-PCB-209		102	495285		1.19		NO	33.54	1.08	33.51	33.57	98.240	98.2		201	193
195	1... 13C-PCB-9		2623198	1009270		1.60		NO	11.83	0.48	11.80	11.86	100.000	100.0		15023	2416
196	1... 13C-PCB-52		1322497	734184		0.80		NO	16.96	0.68	16.93	16.99	100.000	100.0		1590	1104
197	1... 13C-PCB-101		1330062	515843		1.58		NO	20.64	0.83	20.61	20.67	100.000	100.0		932	795
198	1... 13C-PCB-138		1300935	567792	9940	1.29		NO	24.86	0.00	24.83	24.90	100.000	100.0		2342	1590
199	1... 13C-PCB-194		1060227	557243		0.90		NO	31.03	1.25	31.00	31.07	100.000	100.0		2942	3173

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-Q1.qld

Last Altered: Wednesday, November 11, 2015 20:13:55 Eastern Standard Time

Printed: Monday, November 30, 2015 16:17:54 Eastern Standard Time

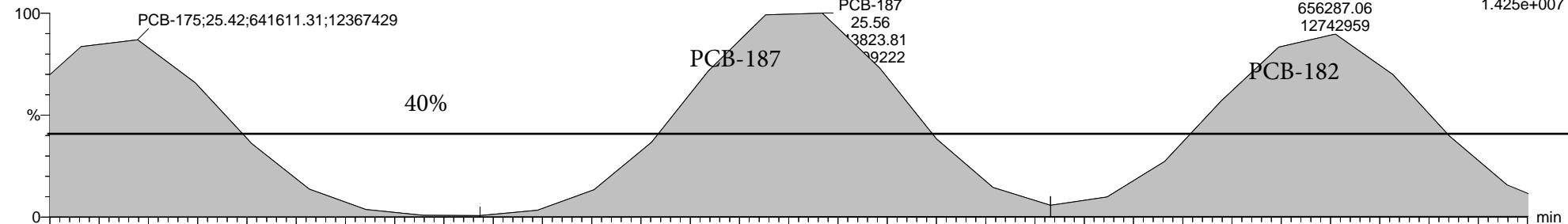
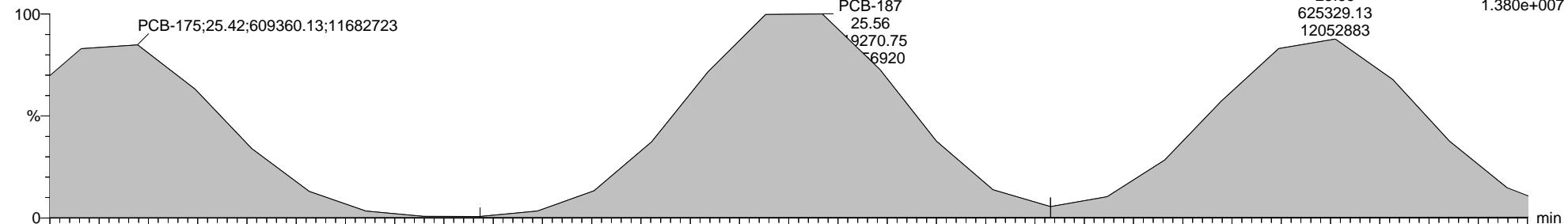
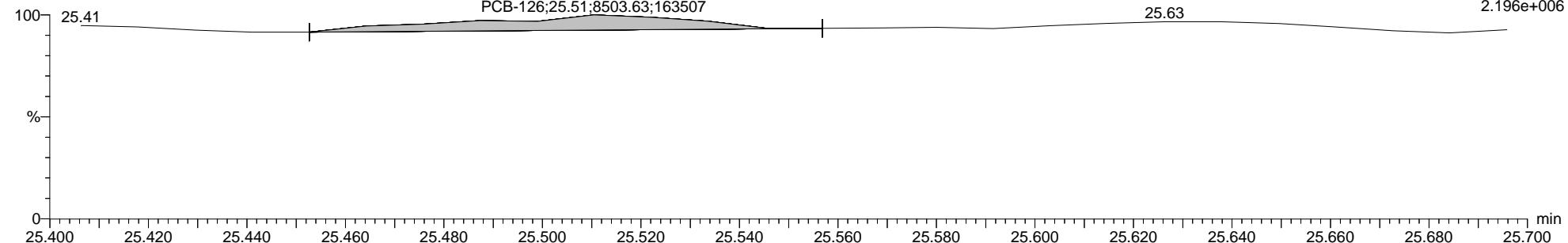
**Method: C:\MassLynx\PCB.PRO\MethDB\1668-OCTYL-1-209CAL-150917.mdb 11 Nov 2015 19:19:38****Calibration: 11 Nov 2015 20:13:55****Name: 5-150917B08, Date: 17-Sep-2015, Time: 20:03:57, ID: H5-15-WDM-214, Description: 1668A-CS#6-015B, Vial: Tray1:1****\* PCB-34**5-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-2145-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-2145-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-214

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-Q1.qld

Last Altered: Wednesday, November 11, 2015 20:13:55 Eastern Standard Time

Printed: Monday, November 30, 2015 16:17:54 Eastern Standard Time

Name: 5-150917B08, Date: 17-Sep-2015, Time: 20:03:57, ID: H5-15-WDM-214, Description: 1668A-CS#6-015B, Vial: Tray1:1

**PCB-187**5-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-2145-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-2145-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-214

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-Q1.qld

Last Altered: Wednesday, November 11, 2015 20:13:55 Eastern Standard Time

Printed: Monday, November 30, 2015 16:17:54 Eastern Standard Time

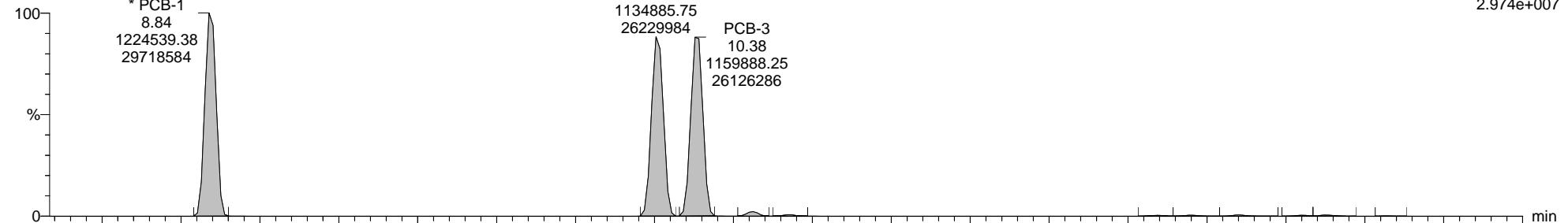
Name: 5-150917B08, Date: 17-Sep-2015, Time: 20:03:57, ID: H5-15-WDM-214, Description: 1668A-CS#6-015B, Vial: Tray1:1

**\* PCB-1**

5-150917B08 Smooth(Mn,1x1)

1668A-CS#6-015B H5-15-WDM-214

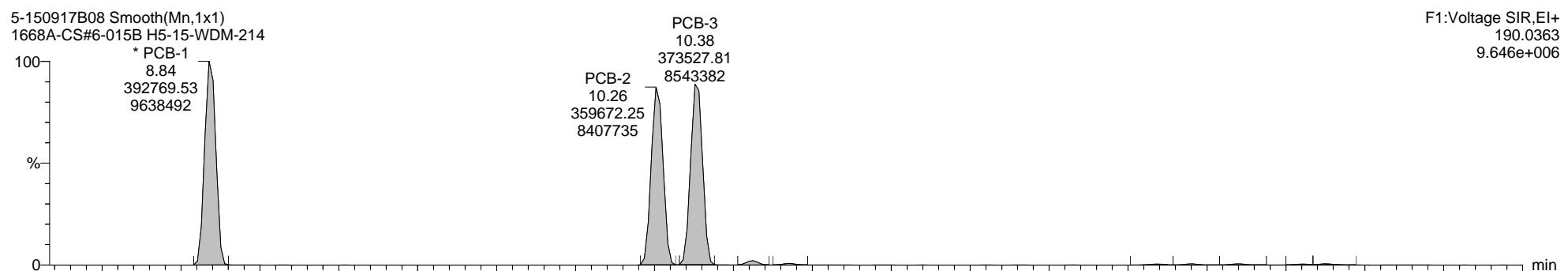
\* PCB-1

8.84  
1224539.38  
29718584PCB-2  
10.26  
1134885.75  
26229984PCB-3  
10.38  
1159888.25  
26126286F1:Voltage SIR,EI+  
188.0393  
2.974e+007

5-150917B08 Smooth(Mn,1x1)

1668A-CS#6-015B H5-15-WDM-214

\* PCB-1

8.84  
392769.53  
9638492PCB-3  
10.38  
373527.81  
8543382PCB-2  
10.26  
359672.25  
8407735F1:Voltage SIR,EI+  
190.0363  
9.646e+006

5-150917B08 Smooth(Mn,1x1)

1668A-CS#6-015B H5-15-WDM-214

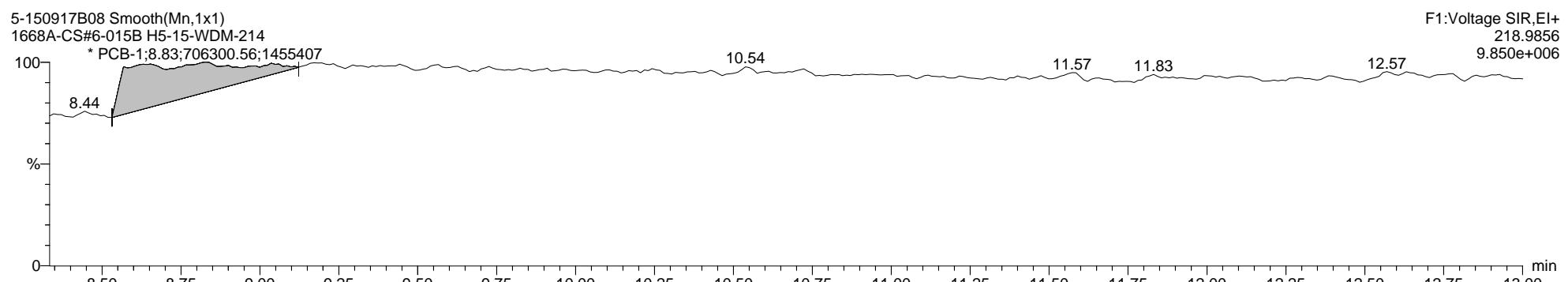
\* PCB-1:8.83;706300.56;1455407

8.44

10.54

11.57

11.83

F1:Voltage SIR,EI+  
218.9856  
9.850e+006

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-Q1.qld

Last Altered: Wednesday, November 11, 2015 20:13:55 Eastern Standard Time

Printed: Monday, November 30, 2015 16:17:54 Eastern Standard Time

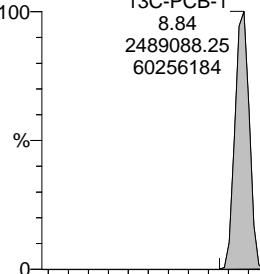
Name: 5-150917B08, Date: 17-Sep-2015, Time: 20:03:57, ID: H5-15-WDM-214, Description: 1668A-CS#6-015B, Vial: Tray1:1

**13C-PCB-1**

5-150917B08 Smooth(Mn,1x1)

1668A-CS#6-015B H5-15-WDM-214

13C-PCB-1

8.84  
2489088.25  
60256184

13C-PCB-3

10.38

2225058.75

51621396

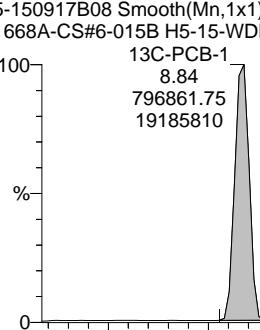
F1:Voltage SIR,EI+  
200.0795  
6.031e+007

min

5-150917B08 Smooth(Mn,1x1)

1668A-CS#6-015B H5-15-WDM-214

13C-PCB-1

8.84  
796861.75  
19185810

13C-PCB-3

10.38

723327.88

16772518

F1:Voltage SIR,EI+  
202.0766  
1.934e+007

min

5-150917B08 Smooth(Mn,1x1)

1668A-CS#6-015B H5-15-WDM-214

\* PCB-1:8.83;706300.56;1455407

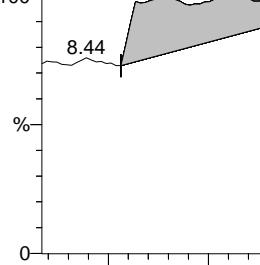
8.44

10.54

11.57

11.83

12.57

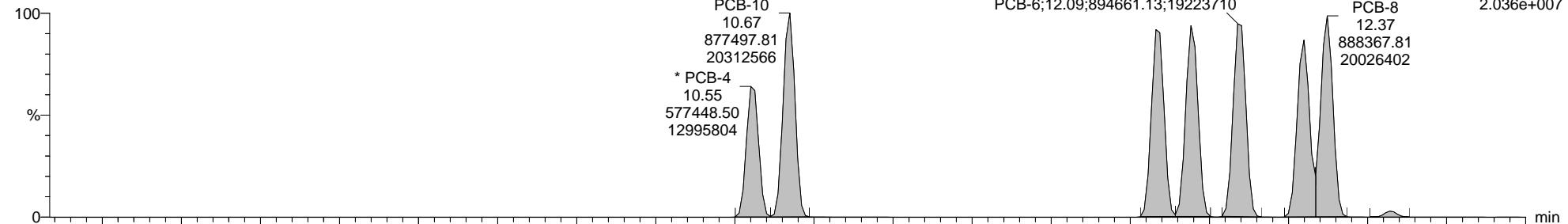
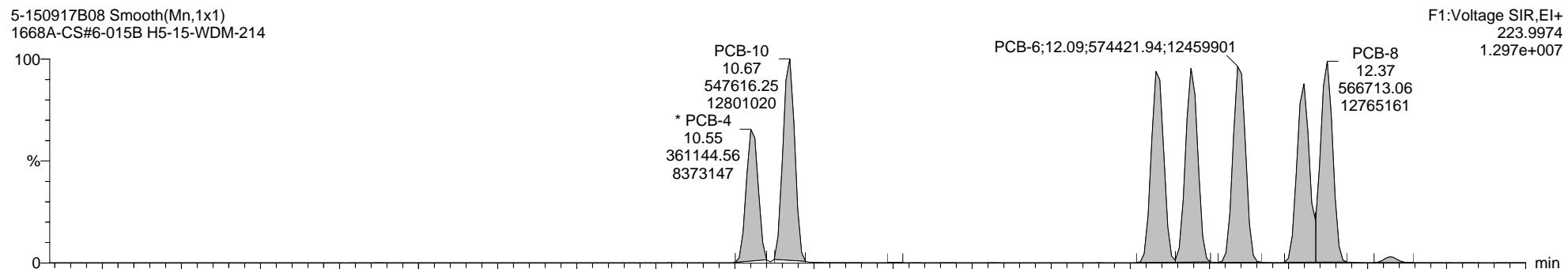
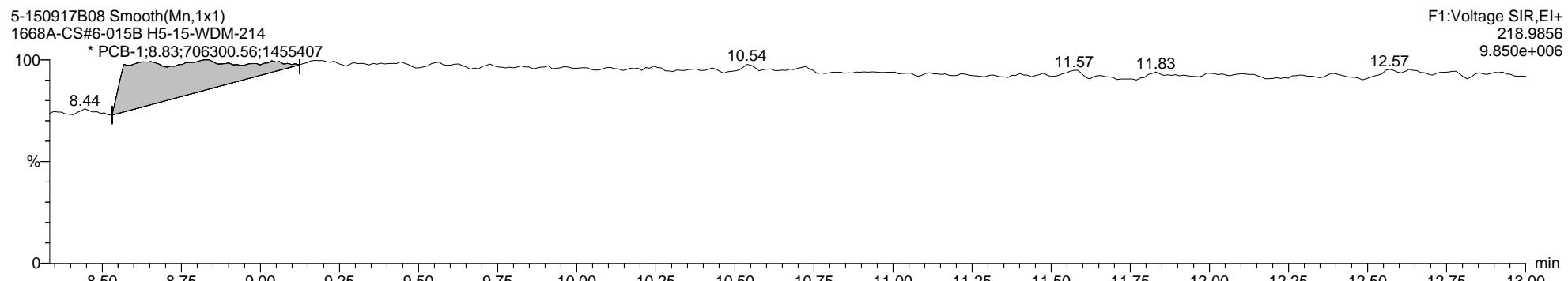
F1:Voltage SIR,EI+  
218.9856  
9.850e+006

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-Q1.qld

Last Altered: Wednesday, November 11, 2015 20:13:55 Eastern Standard Time

Printed: Monday, November 30, 2015 16:17:54 Eastern Standard Time

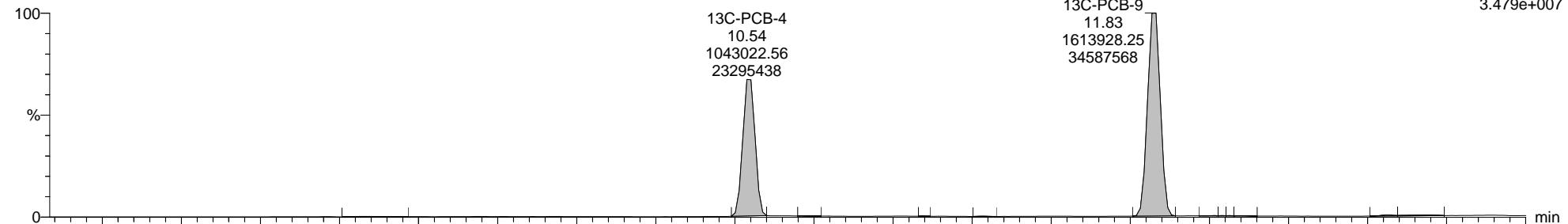
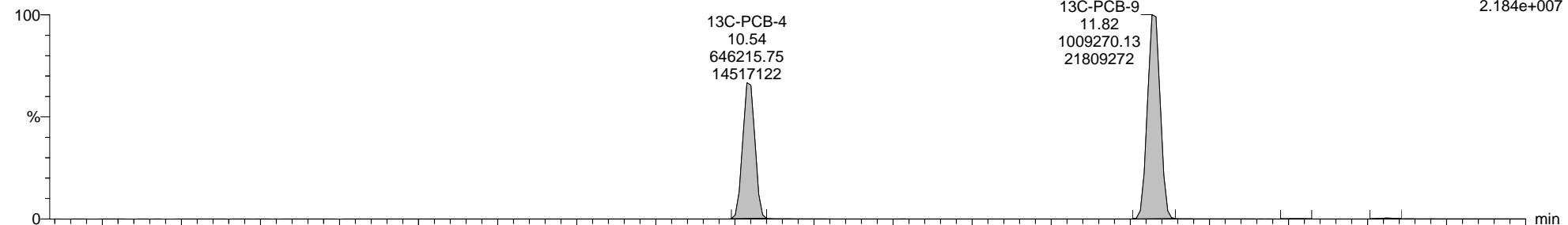
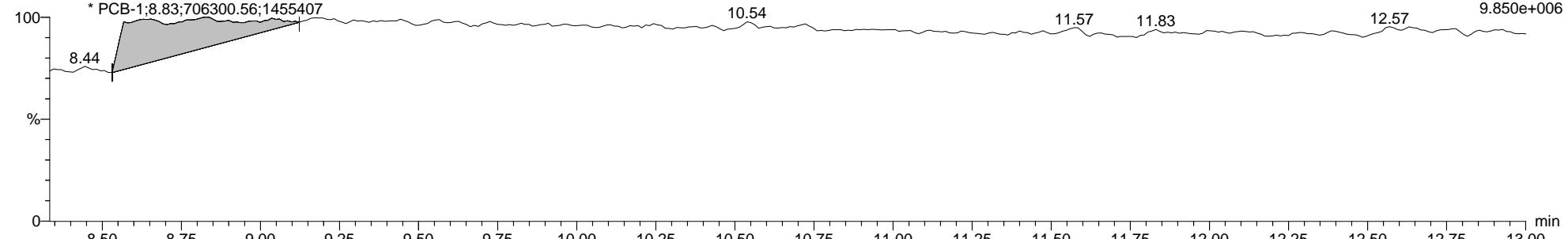
Name: 5-150917B08, Date: 17-Sep-2015, Time: 20:03:57, ID: H5-15-WDM-214, Description: 1668A-CS#6-015B, Vial: Tray1:1

**\* PCB-4**5-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-2145-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-2145-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-214  
\* PCB-1: 8.83; 706300.56; 1455407

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-Q1.qld

Last Altered: Wednesday, November 11, 2015 20:13:55 Eastern Standard Time

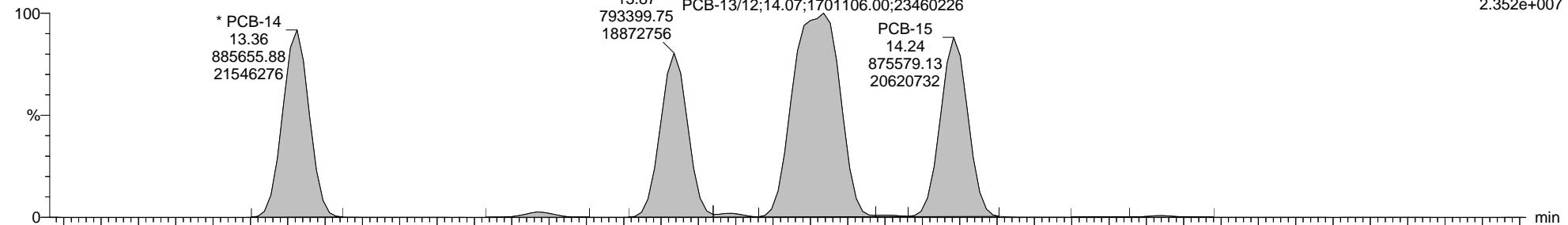
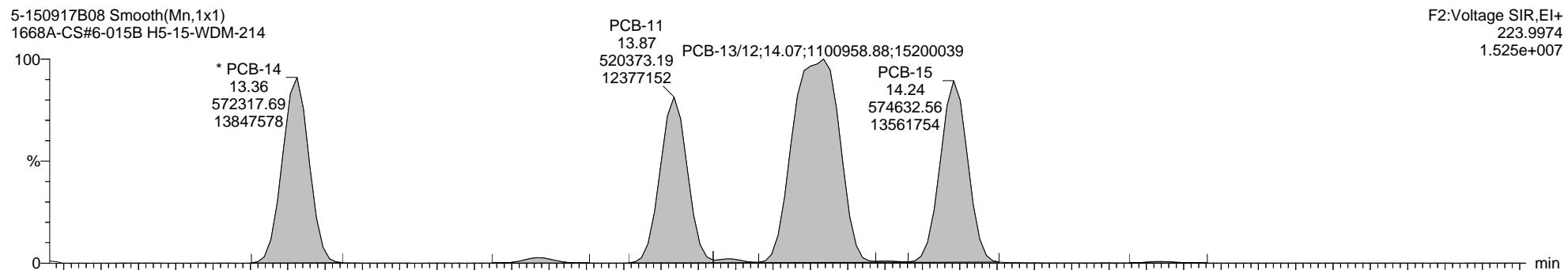
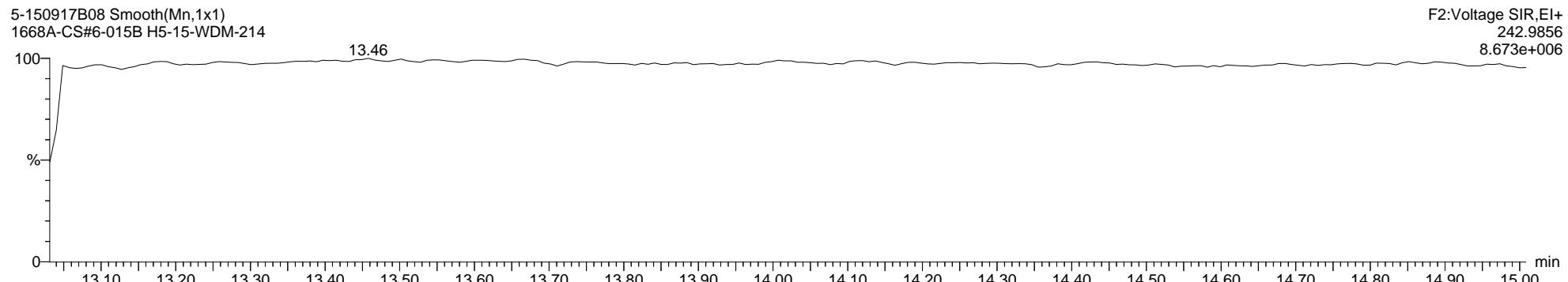
Printed: Monday, November 30, 2015 16:17:54 Eastern Standard Time

**Name: 5-150917B08, Date: 17-Sep-2015, Time: 20:03:57, ID: H5-15-WDM-214, Description: 1668A-CS#6-015B, Vial: Tray1:1****13C-PCB-4**5-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-2145-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-2145-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-214  
\* PCB-1:8.83;706300.56;1455407

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-Q1.qld

Last Altered: Wednesday, November 11, 2015 20:13:55 Eastern Standard Time

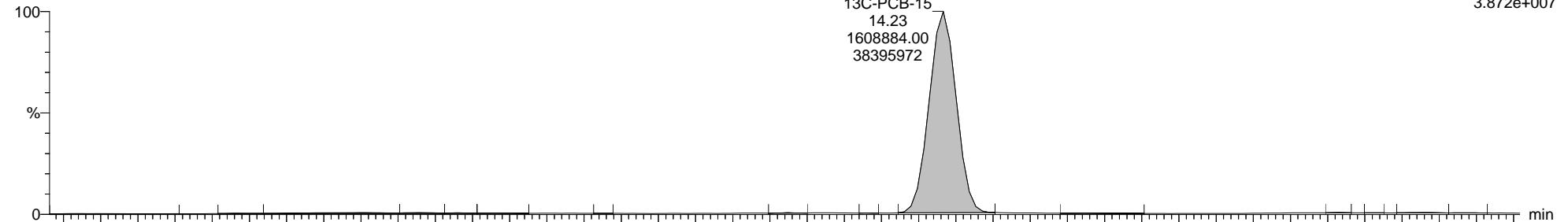
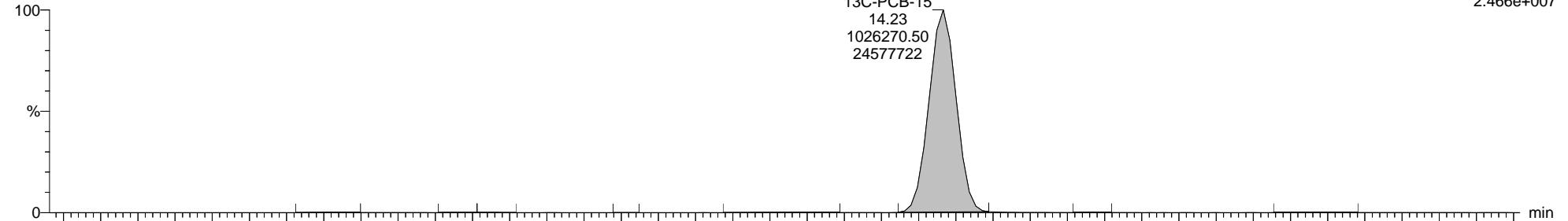
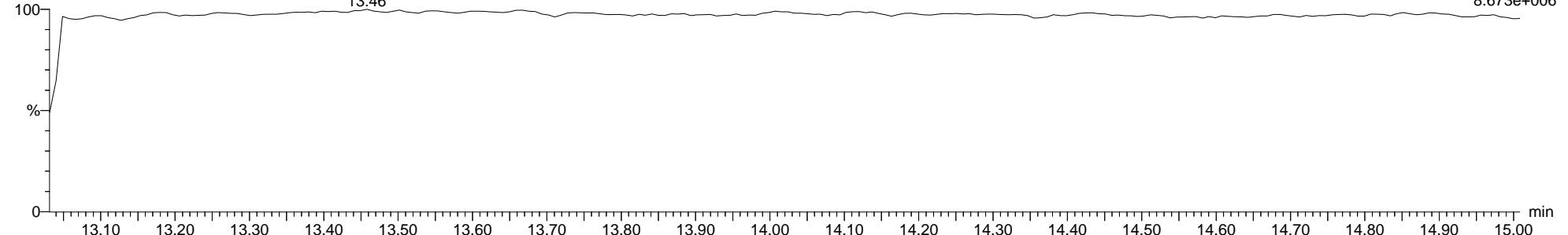
Printed: Monday, November 30, 2015 16:17:54 Eastern Standard Time

**Name: 5-150917B08, Date: 17-Sep-2015, Time: 20:03:57, ID: H5-15-WDM-214, Description: 1668A-CS#6-015B, Vial: Tray1:1****PCB-15**5-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-2145-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-2145-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-214

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-Q1.qld

Last Altered: Wednesday, November 11, 2015 20:13:55 Eastern Standard Time

Printed: Monday, November 30, 2015 16:17:54 Eastern Standard Time

**Name: 5-150917B08, Date: 17-Sep-2015, Time: 20:03:57, ID: H5-15-WDM-214, Description: 1668A-CS#6-015B, Vial: Tray1:1****13C-PCB-15**5-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-214F2:Voltage SIR,EI+  
234.0406  
3.872e+0075-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-214F2:Voltage SIR,EI+  
236.0376  
2.466e+0075-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-214F2:Voltage SIR,EI+  
242.9856  
8.673e+006

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-Q1.qld

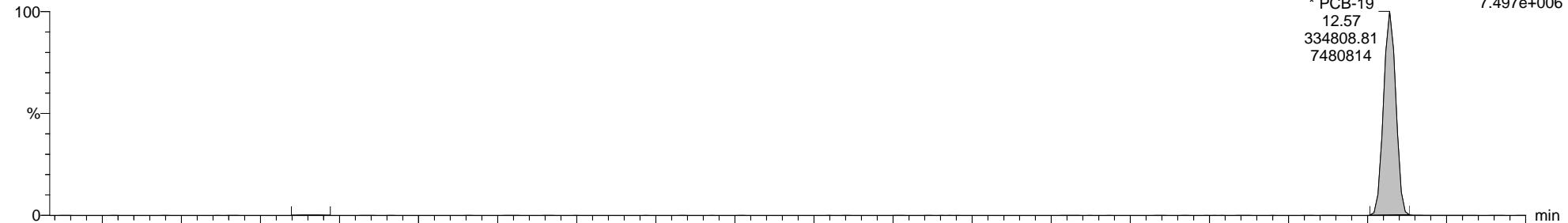
Last Altered: Wednesday, November 11, 2015 20:13:55 Eastern Standard Time

Printed: Monday, November 30, 2015 16:17:54 Eastern Standard Time

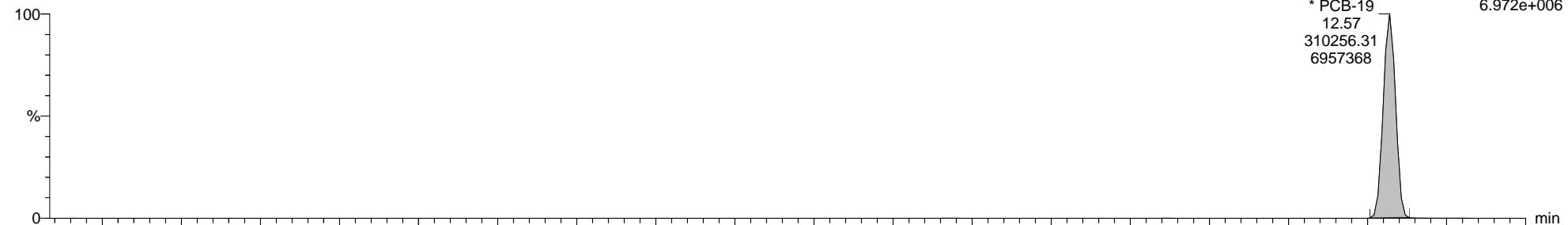
Name: 5-150917B08, Date: 17-Sep-2015, Time: 20:03:57, ID: H5-15-WDM-214, Description: 1668A-CS#6-015B, Vial: Tray1:1

\* PCB-19

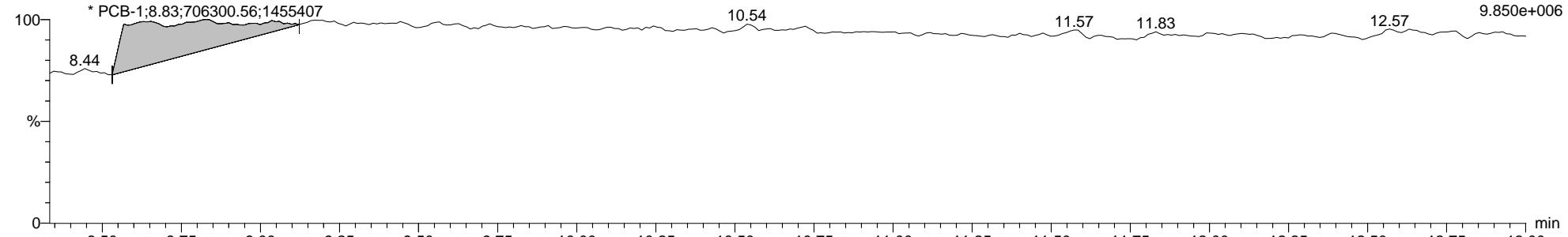
5-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-214



5-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-214



5-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-214

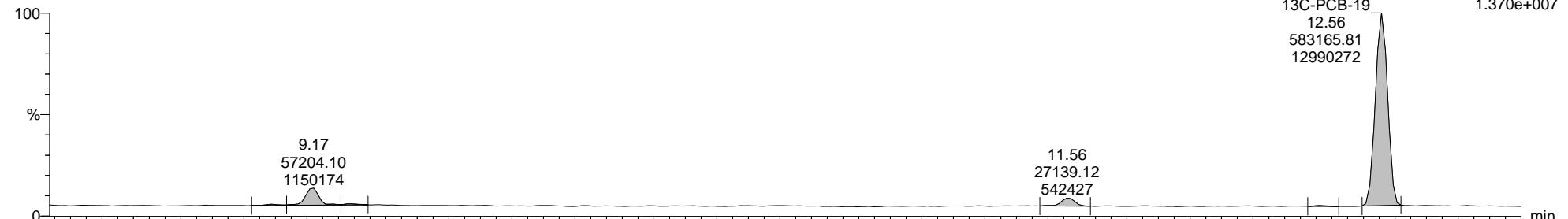
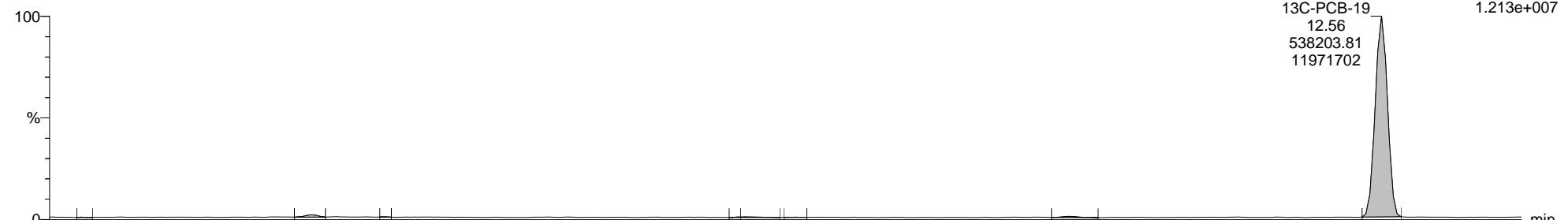
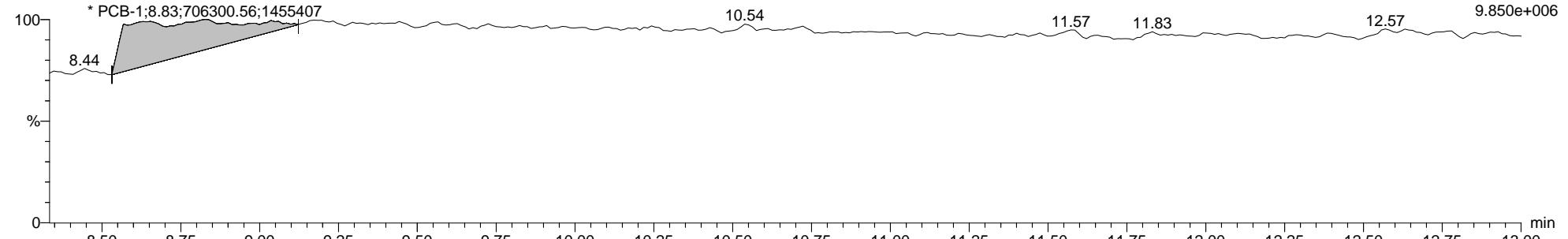


Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-Q1.qld

Last Altered: Wednesday, November 11, 2015 20:13:55 Eastern Standard Time

Printed: Monday, November 30, 2015 16:17:54 Eastern Standard Time

Name: 5-150917B08, Date: 17-Sep-2015, Time: 20:03:57, ID: H5-15-WDM-214, Description: 1668A-CS#6-015B, Vial: Tray1:1

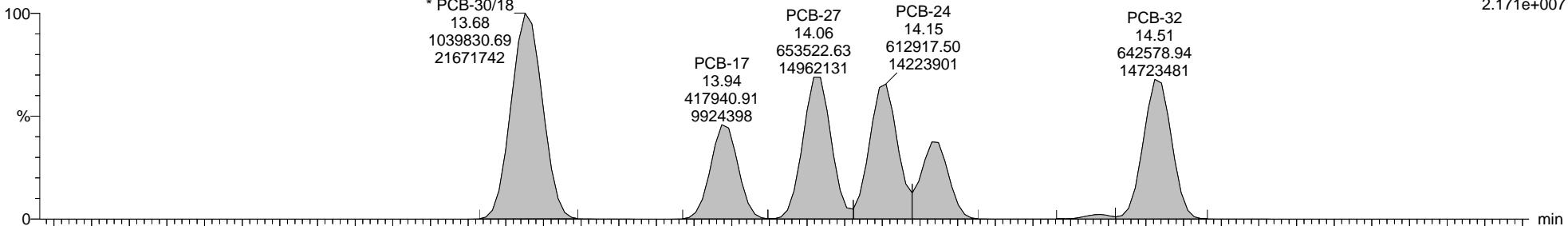
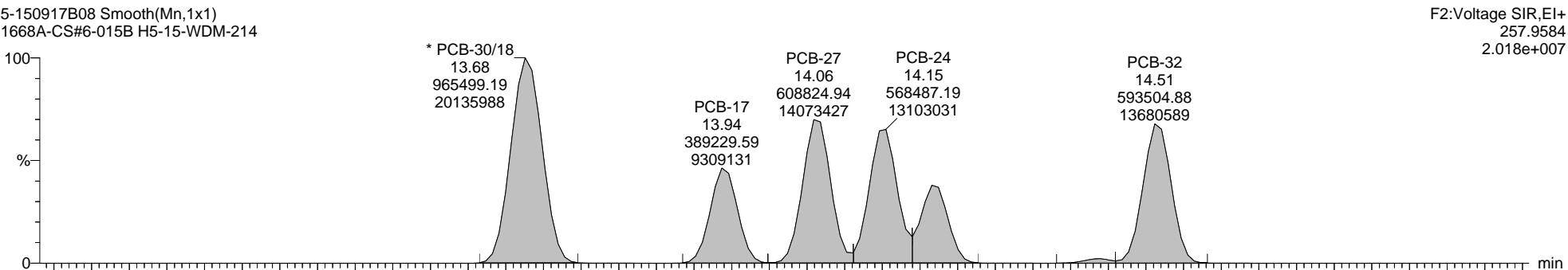
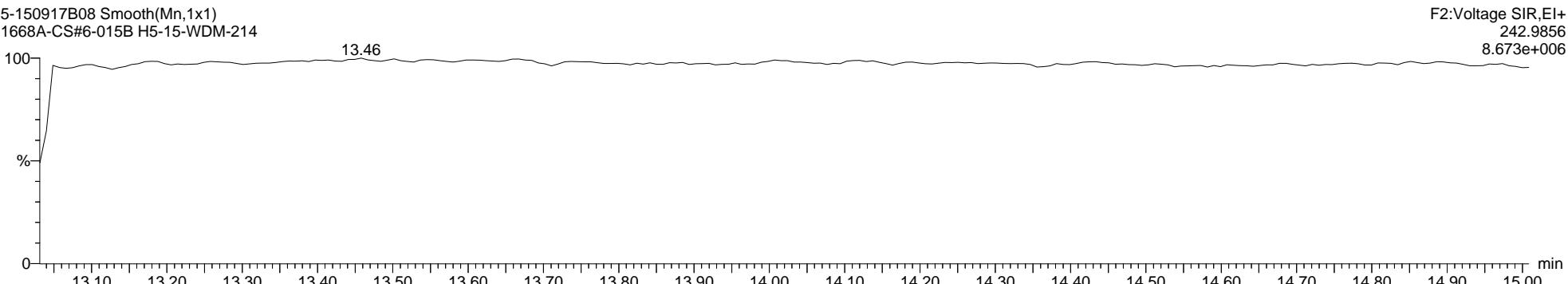
**13C-PCB-19**5-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-2145-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-2145-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-214  
\* PCB-1:8.83;706300.56;1455407

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-Q1.qld

Last Altered: Wednesday, November 11, 2015 20:13:55 Eastern Standard Time

Printed: Monday, November 30, 2015 16:17:54 Eastern Standard Time

Name: 5-150917B08, Date: 17-Sep-2015, Time: 20:03:57, ID: H5-15-WDM-214, Description: 1668A-CS#6-015B, Vial: Tray1:1

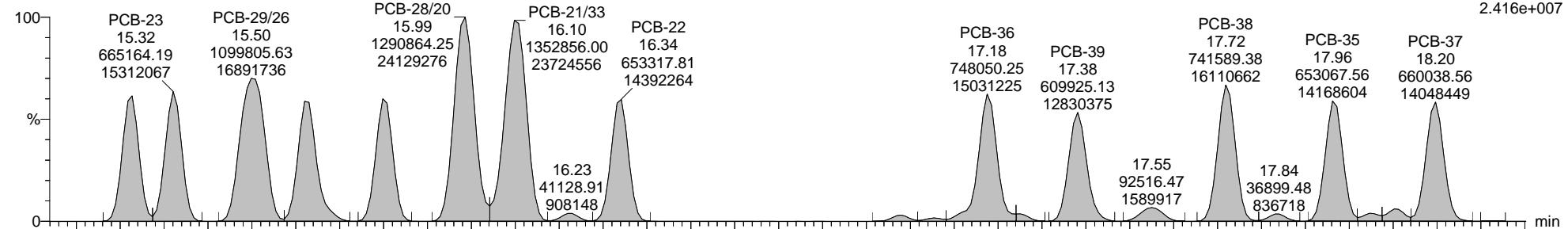
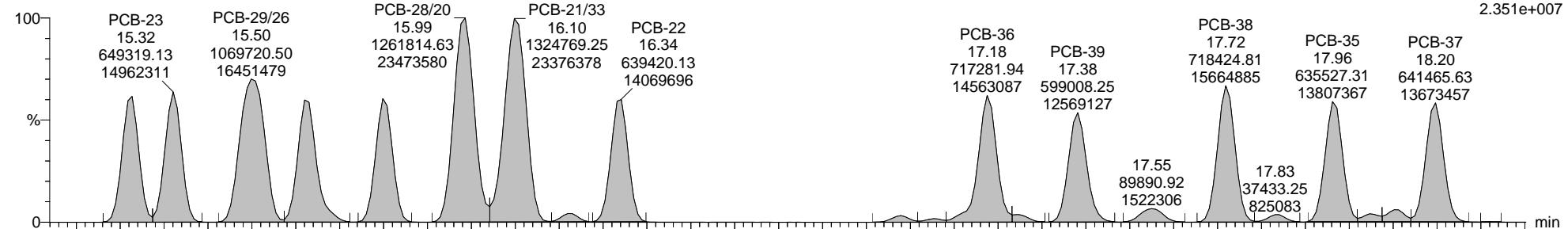
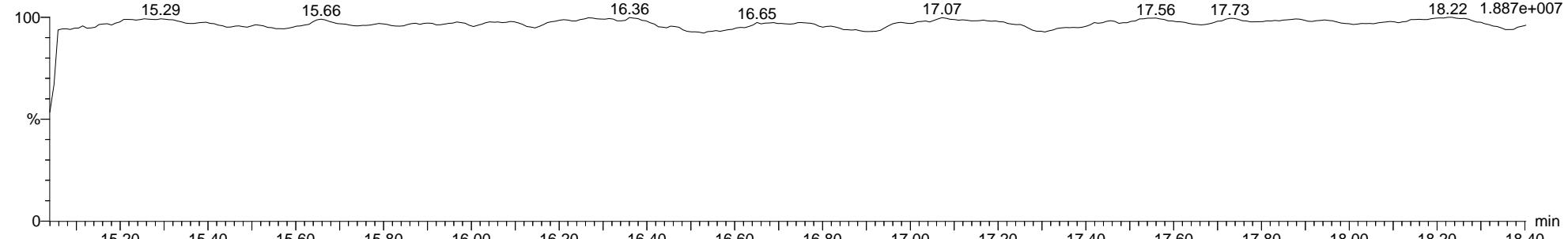
**\* PCB-30/18**5-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-2145-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-2145-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-214

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-Q1.qld

Last Altered: Wednesday, November 11, 2015 20:13:55 Eastern Standard Time

Printed: Monday, November 30, 2015 16:17:54 Eastern Standard Time

Name: 5-150917B08, Date: 17-Sep-2015, Time: 20:03:57, ID: H5-15-WDM-214, Description: 1668A-CS#6-015B, Vial: Tray1:1

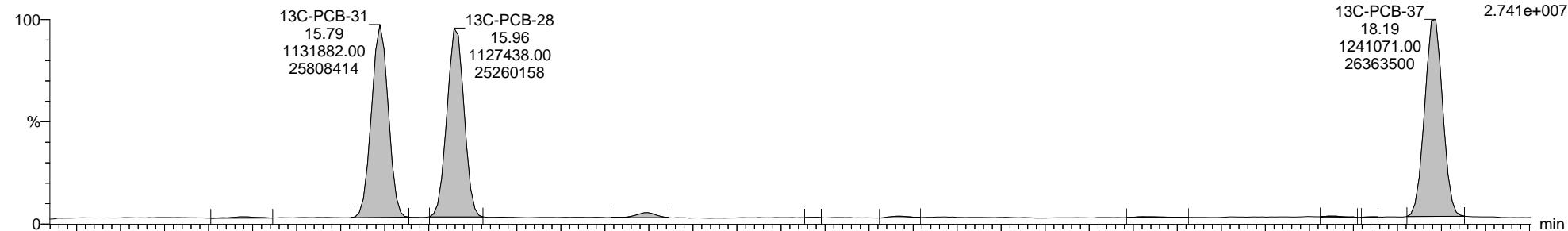
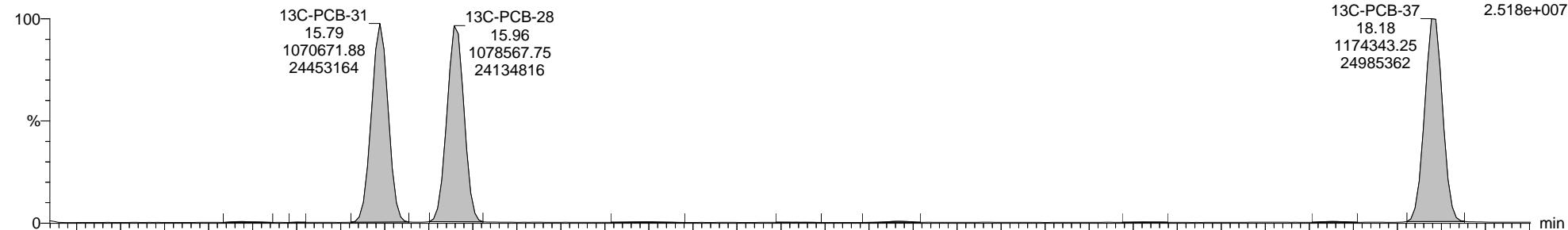
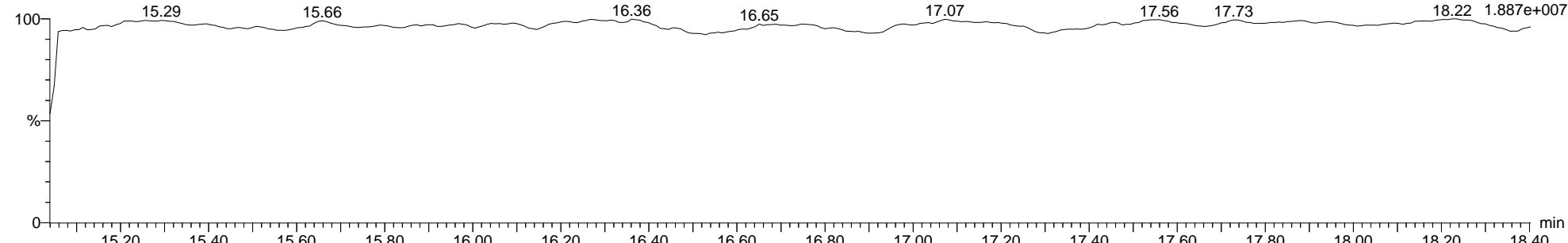
**PCB-37**5-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-2145-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-2145-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-214

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-Q1.qld

Last Altered: Wednesday, November 11, 2015 20:13:55 Eastern Standard Time

Printed: Monday, November 30, 2015 16:17:54 Eastern Standard Time

Name: 5-150917B08, Date: 17-Sep-2015, Time: 20:03:57, ID: H5-15-WDM-214, Description: 1668A-CS#6-015B, Vial: Tray1:1

**13C-PCB-37**5-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-2145-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-2145-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-214

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-Q1.qld

Last Altered: Wednesday, November 11, 2015 20:13:55 Eastern Standard Time

Printed: Monday, November 30, 2015 16:17:54 Eastern Standard Time

Name: 5-150917B08, Date: 17-Sep-2015, Time: 20:03:57, ID: H5-15-WDM-214, Description: 1668A-CS#6-015B, Vial: Tray1:1

\* PCB-54

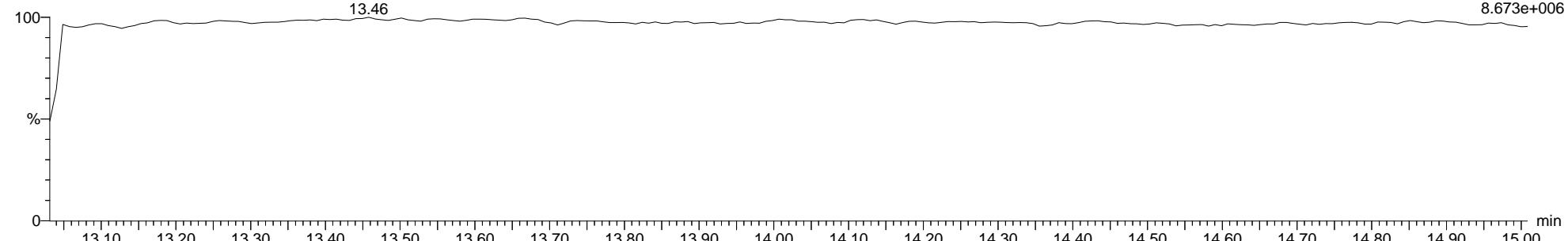
5-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-214



5-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-214



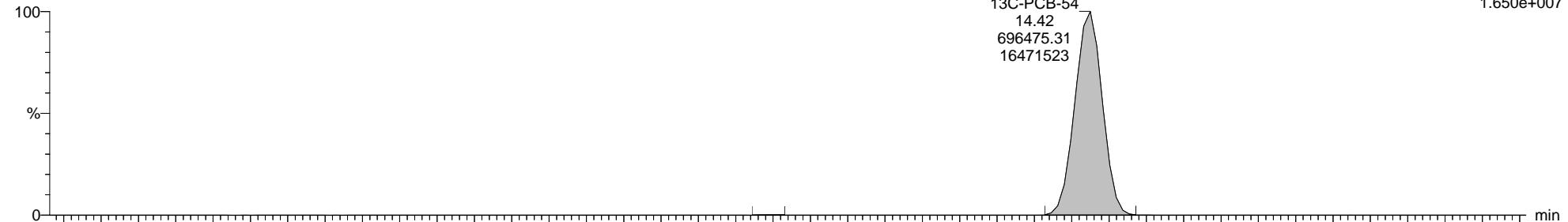
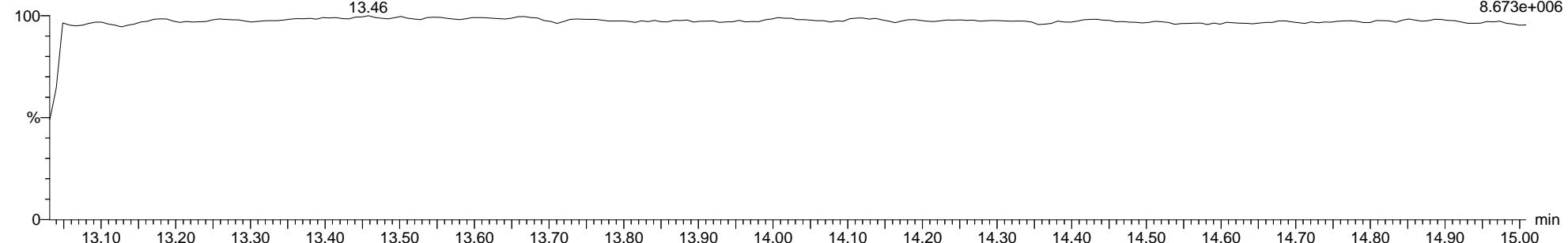
5-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-214



Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-Q1.qld

Last Altered: Wednesday, November 11, 2015 20:13:55 Eastern Standard Time

Printed: Monday, November 30, 2015 16:17:54 Eastern Standard Time

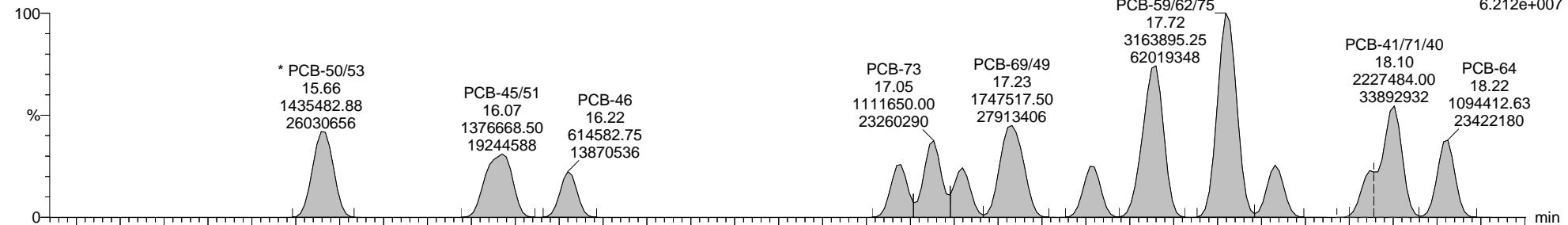
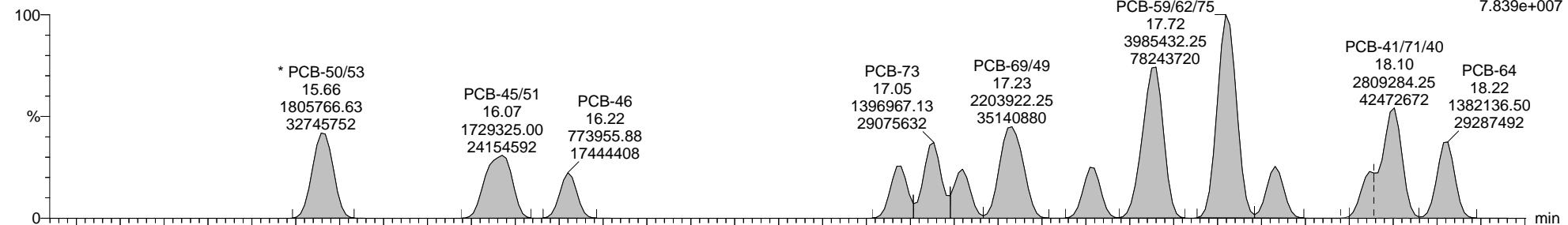
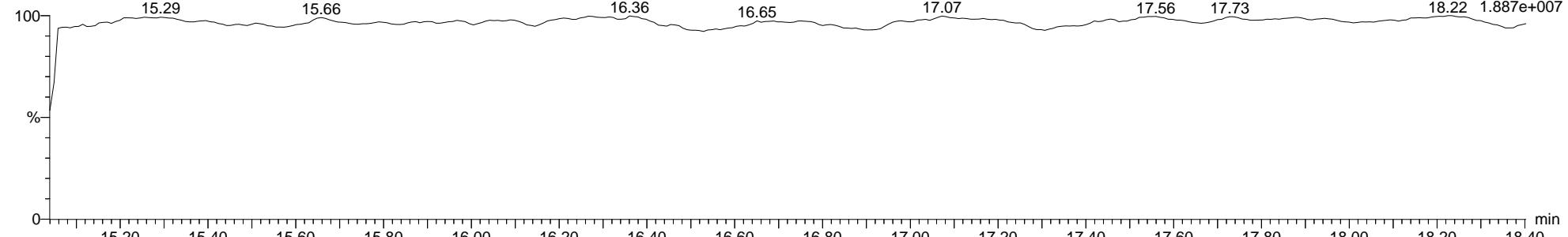
**Name: 5-150917B08, Date: 17-Sep-2015, Time: 20:03:57, ID: H5-15-WDM-214, Description: 1668A-CS#6-015B, Vial: Tray1:1****13C-PCB-54**5-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-2145-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-2145-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-214

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-Q1.qld

Last Altered: Wednesday, November 11, 2015 20:13:55 Eastern Standard Time

Printed: Monday, November 30, 2015 16:17:54 Eastern Standard Time

Name: 5-150917B08, Date: 17-Sep-2015, Time: 20:03:57, ID: H5-15-WDM-214, Description: 1668A-CS#6-015B, Vial: Tray1:1

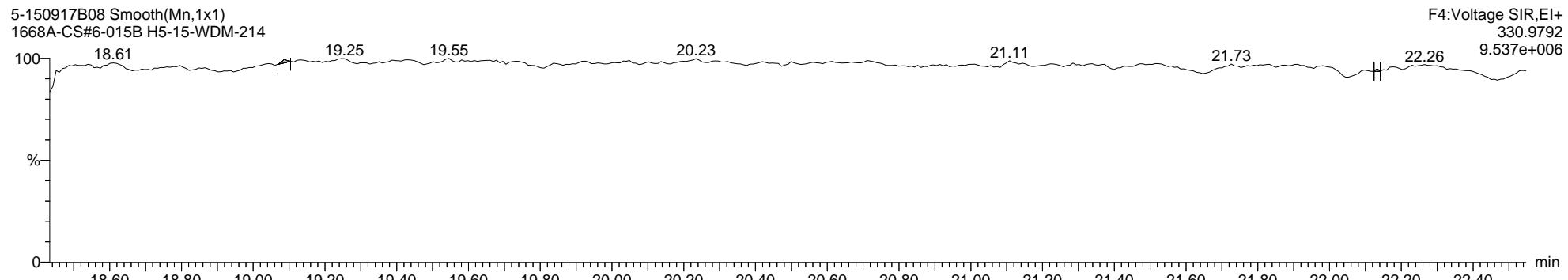
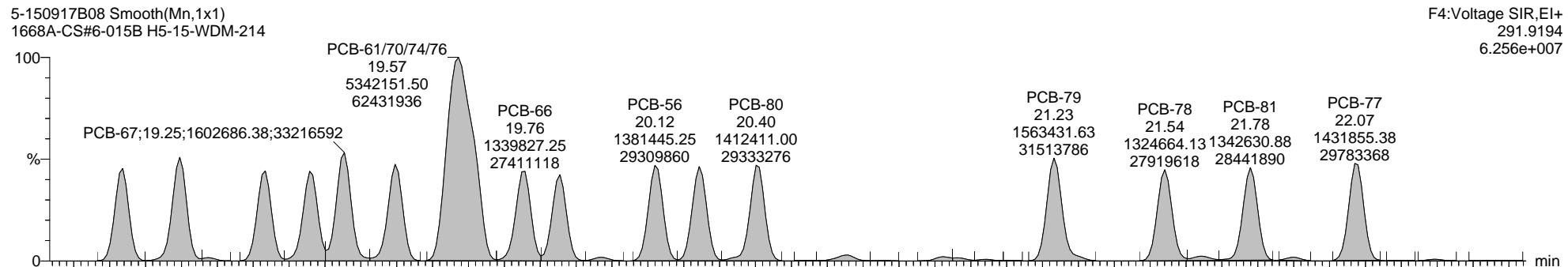
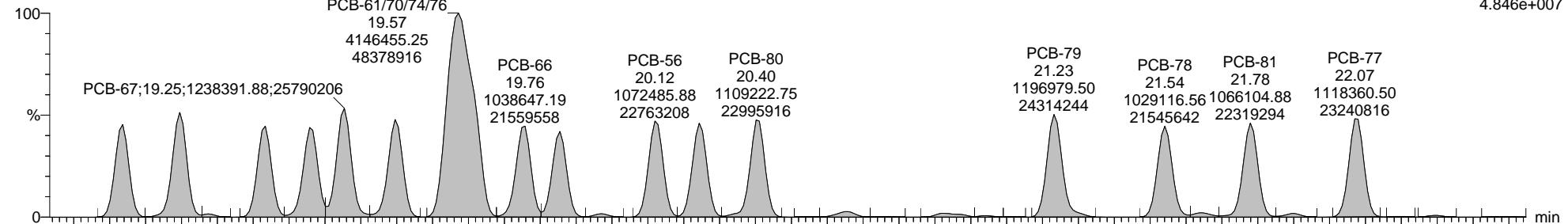
**\* PCB-50/53**5-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-2145-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-2145-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-214

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-Q1.qld

Last Altered: Wednesday, November 11, 2015 20:13:55 Eastern Standard Time

Printed: Monday, November 30, 2015 16:17:54 Eastern Standard Time

Name: 5-150917B08, Date: 17-Sep-2015, Time: 20:03:57, ID: H5-15-WDM-214, Description: 1668A-CS#6-015B, Vial: Tray1:1

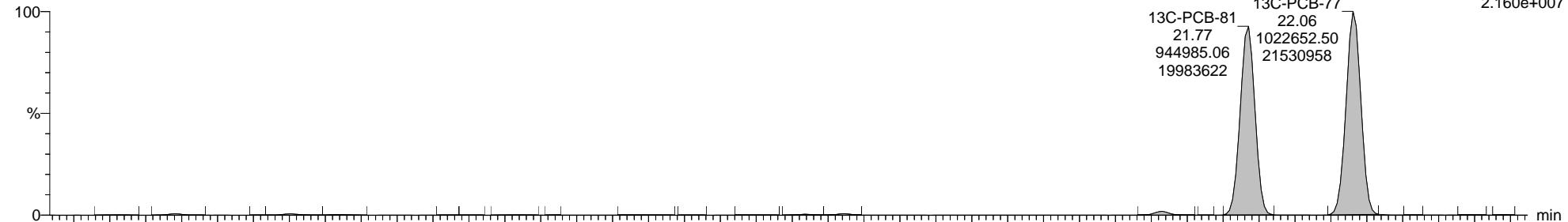
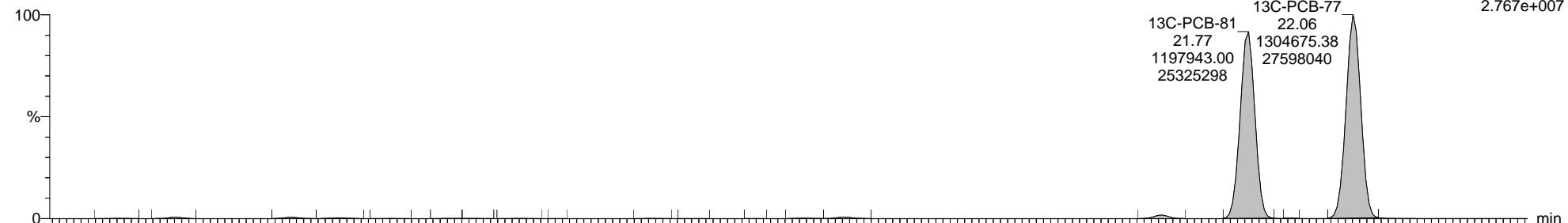
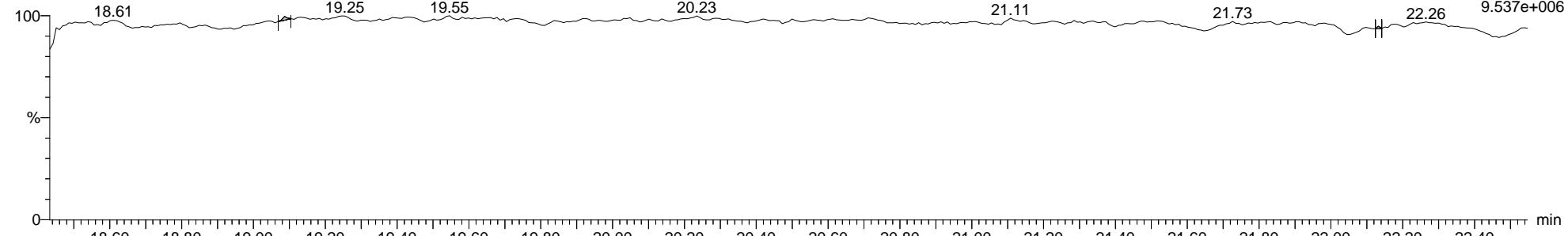
**PCB-81**5-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-214

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-Q1.qld

Last Altered: Wednesday, November 11, 2015 20:13:55 Eastern Standard Time

Printed: Monday, November 30, 2015 16:17:54 Eastern Standard Time

Name: 5-150917B08, Date: 17-Sep-2015, Time: 20:03:57, ID: H5-15-WDM-214, Description: 1668A-CS#6-015B, Vial: Tray1:1

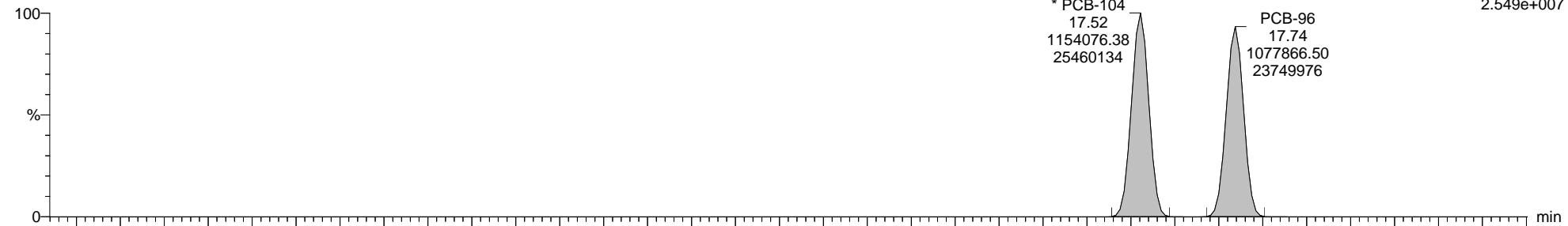
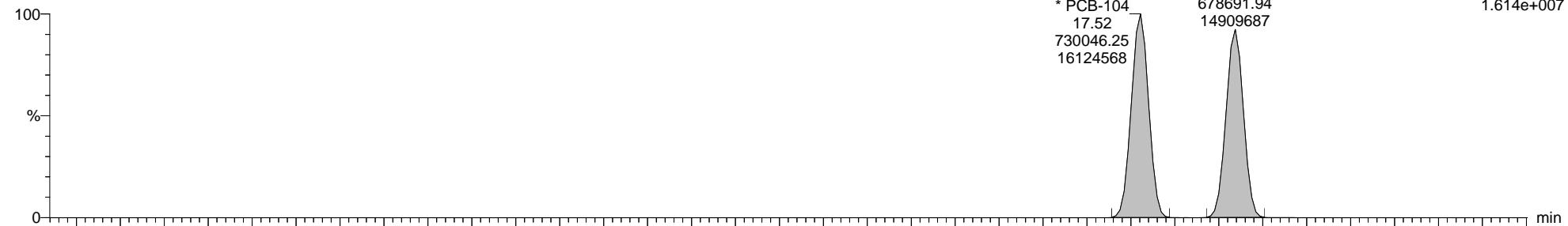
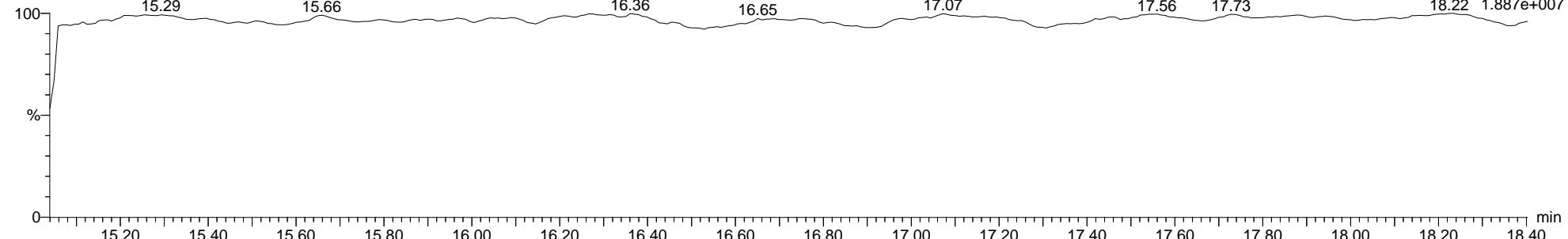
**13C-PCB-81**5-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-2145-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-2145-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-214

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-Q1.qld

Last Altered: Wednesday, November 11, 2015 20:13:55 Eastern Standard Time

Printed: Monday, November 30, 2015 16:17:54 Eastern Standard Time

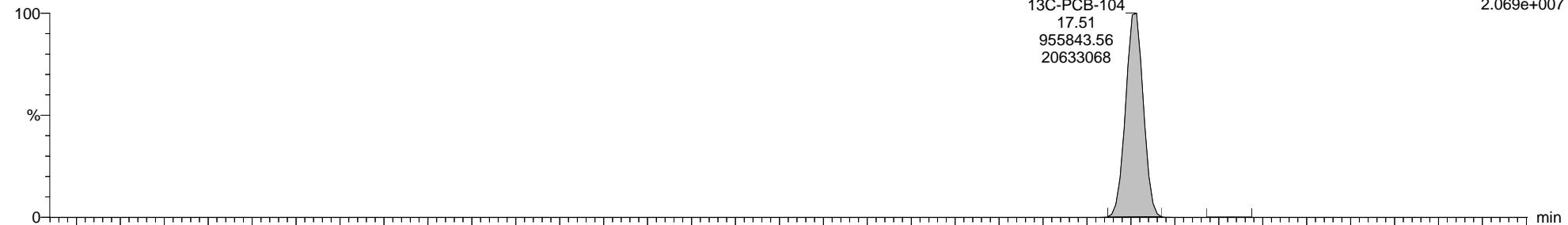
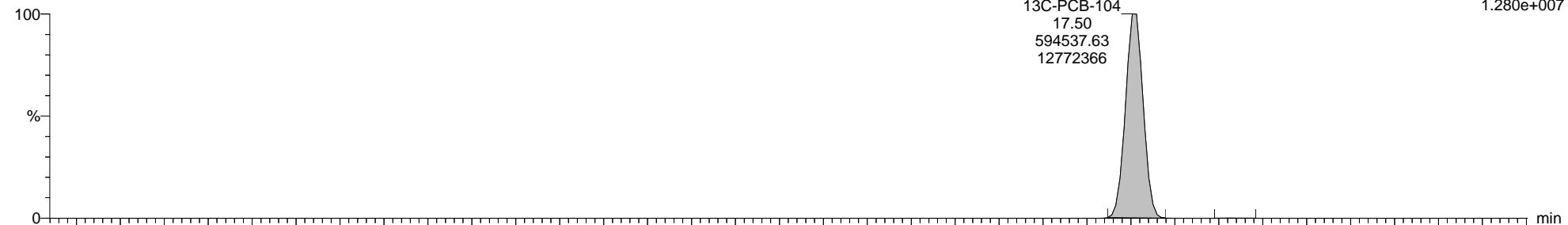
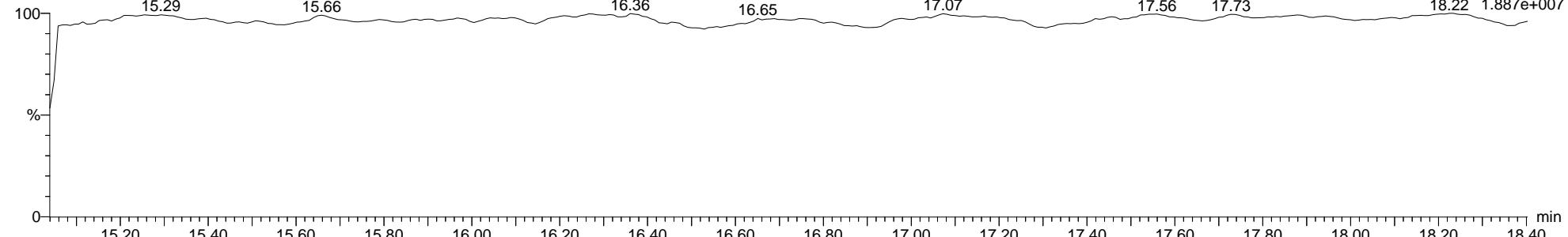
Name: 5-150917B08, Date: 17-Sep-2015, Time: 20:03:57, ID: H5-15-WDM-214, Description: 1668A-CS#6-015B, Vial: Tray1:1

**\* PCB-104**5-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-214F3:Voltage SIR,EI+  
325.8804  
2.549e+0075-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-214F3:Voltage SIR,EI+  
327.8775  
1.614e+0075-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-214F3:Voltage SIR,EI+  
280.9825  
1.887e+007

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-Q1.qld

Last Altered: Wednesday, November 11, 2015 20:13:55 Eastern Standard Time

Printed: Monday, November 30, 2015 16:17:54 Eastern Standard Time

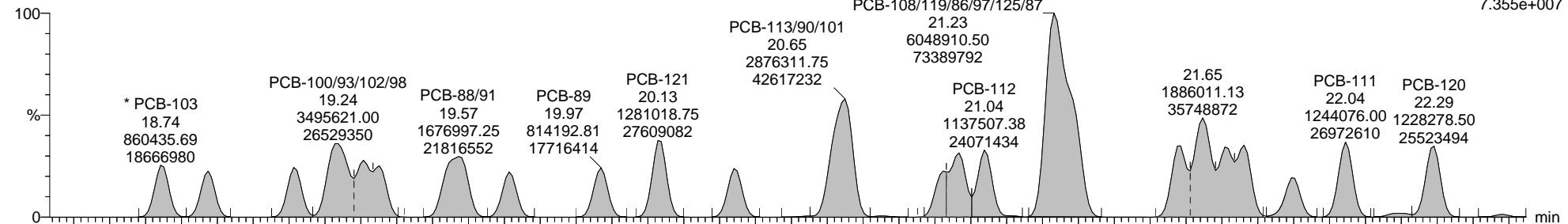
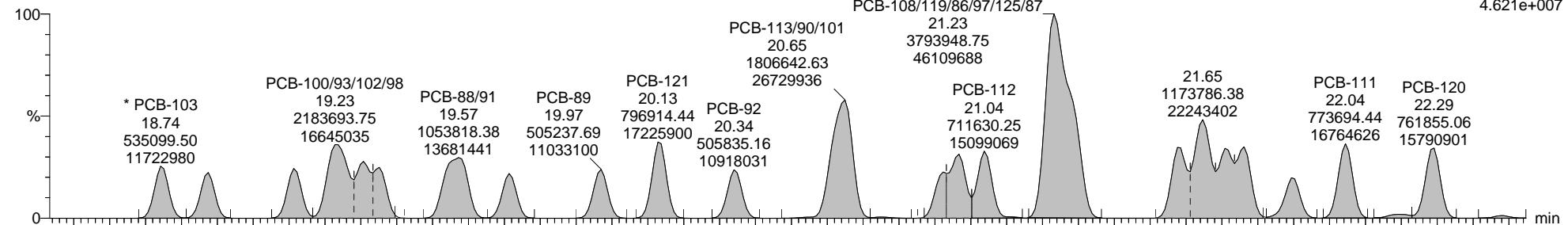
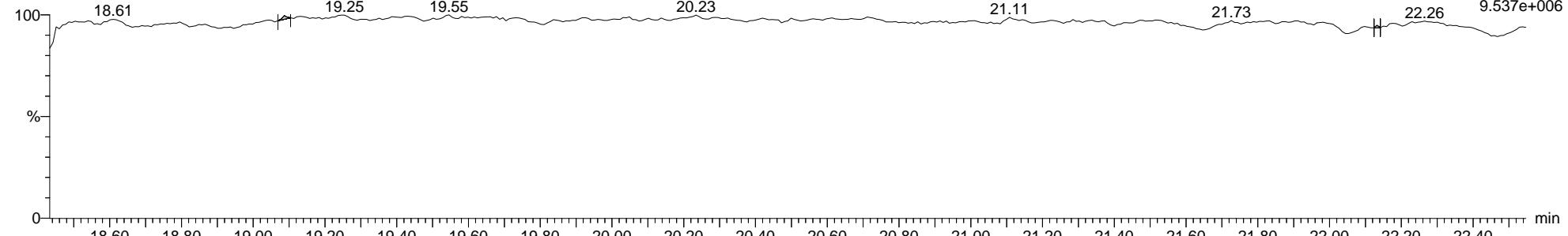
**Name: 5-150917B08, Date: 17-Sep-2015, Time: 20:03:57, ID: H5-15-WDM-214, Description: 1668A-CS#6-015B, Vial: Tray1:1****13C-PCB-104**5-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-2145-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-2145-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-214

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-Q1.qld

Last Altered: Wednesday, November 11, 2015 20:13:55 Eastern Standard Time

Printed: Monday, November 30, 2015 16:17:54 Eastern Standard Time

Name: 5-150917B08, Date: 17-Sep-2015, Time: 20:03:57, ID: H5-15-WDM-214, Description: 1668A-CS#6-015B, Vial: Tray1:1

**PCB-113/90/101**5-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-2145-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-2145-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-214

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-Q1.qld

Last Altered: Wednesday, November 11, 2015 20:13:55 Eastern Standard Time

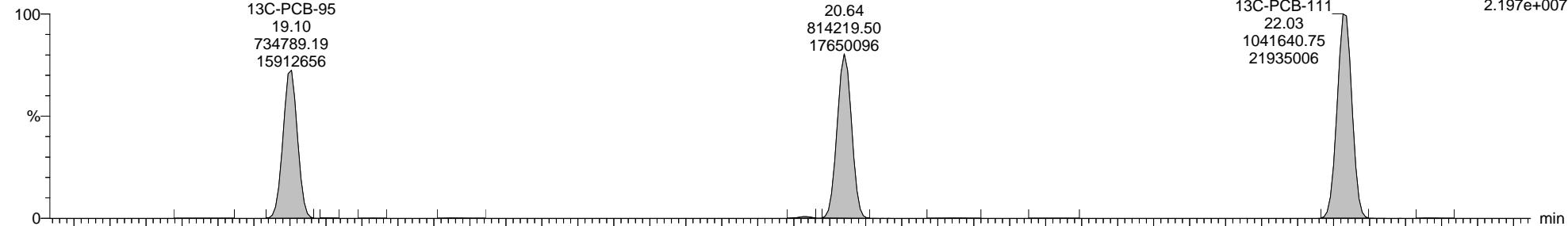
Printed: Monday, November 30, 2015 16:17:54 Eastern Standard Time

Name: 5-150917B08, Date: 17-Sep-2015, Time: 20:03:57, ID: H5-15-WDM-214, Description: 1668A-CS#6-015B, Vial: Tray1:1

**13C-PCB-101**

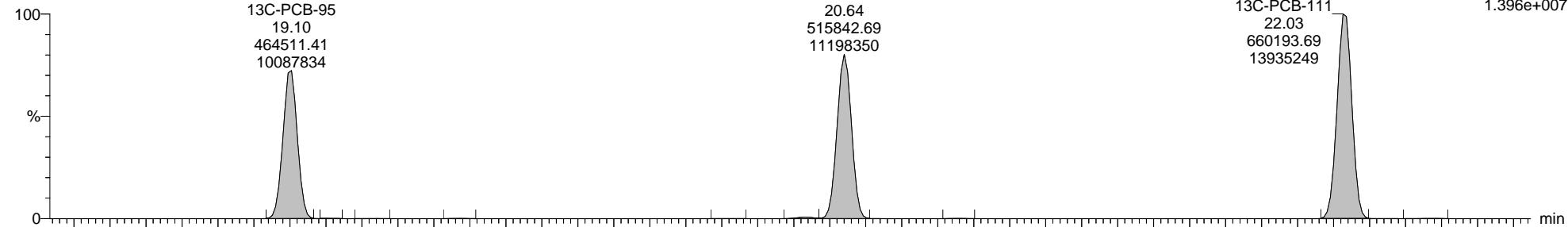
5-150917B08 Smooth(Mn,1x1)

1668A-CS#6-015B H5-15-WDM-214



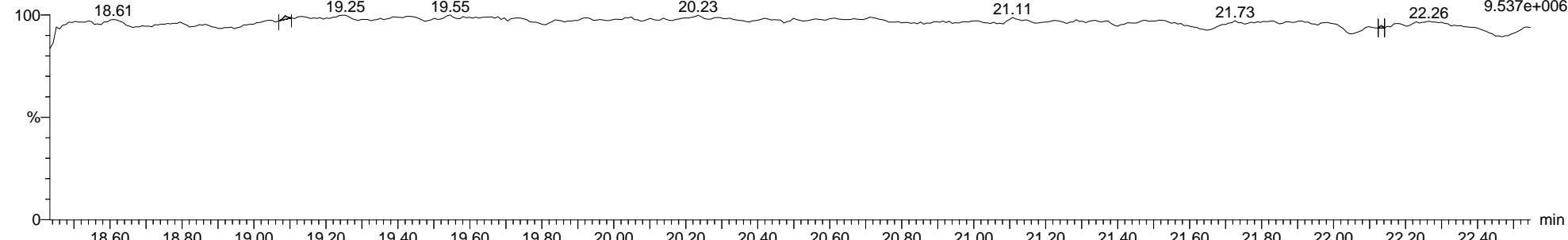
5-150917B08 Smooth(Mn,1x1)

1668A-CS#6-015B H5-15-WDM-214



5-150917B08 Smooth(Mn,1x1)

1668A-CS#6-015B H5-15-WDM-214



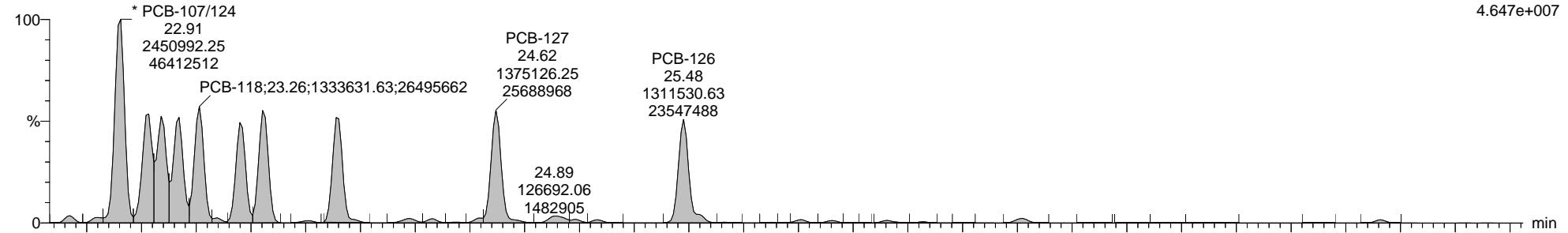
Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-Q1.qld

Last Altered: Wednesday, November 11, 2015 20:13:55 Eastern Standard Time  
Printed: Monday, November 30, 2015 16:17:54 Eastern Standard Time

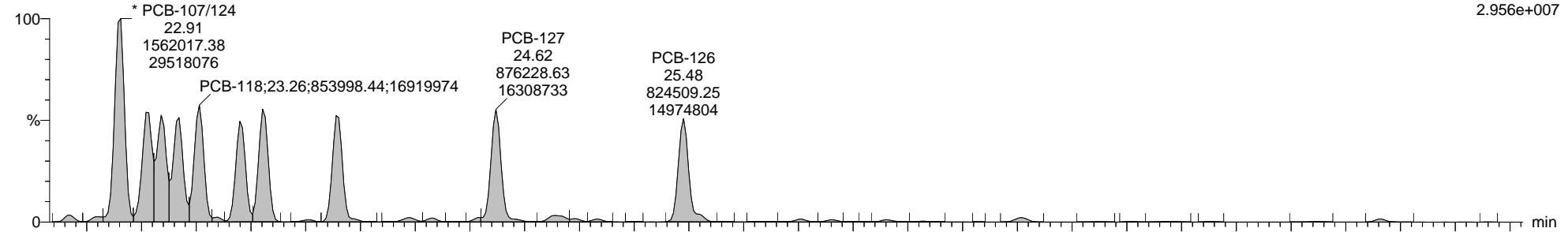
Name: 5-150917B08, Date: 17-Sep-2015, Time: 20:03:57, ID: H5-15-WDM-214, Description: 1668A-CS#6-015B, Vial: Tray1:1

PCB-123

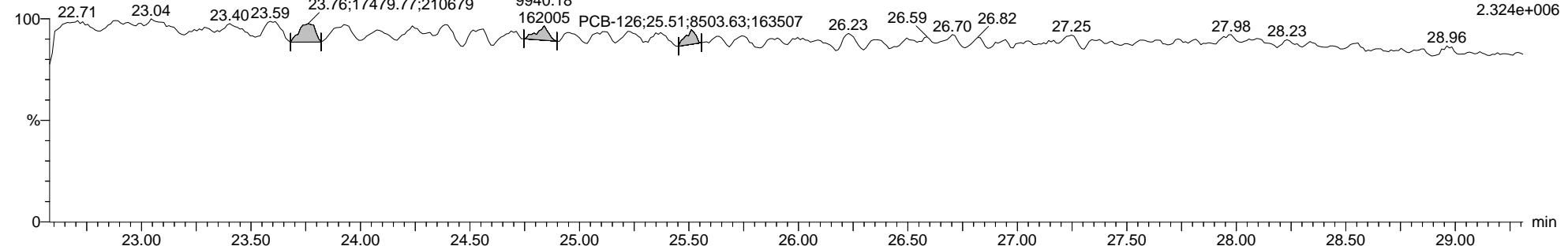
5-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-214



5-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-214



5-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-214

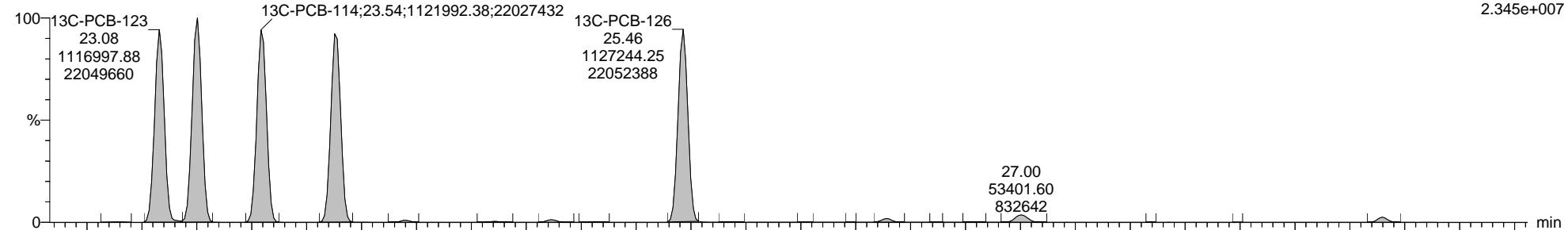
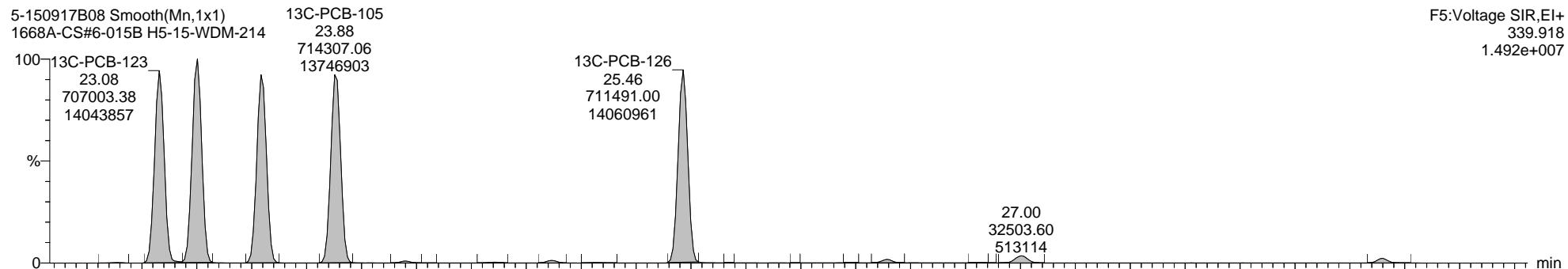
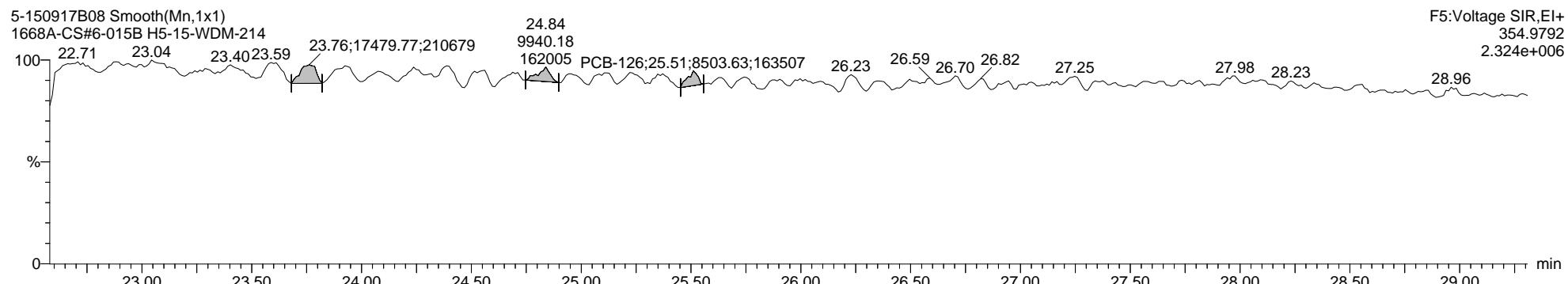


Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-Q1.qld

Last Altered: Wednesday, November 11, 2015 20:13:55 Eastern Standard Time

Printed: Monday, November 30, 2015 16:17:54 Eastern Standard Time

Name: 5-150917B08, Date: 17-Sep-2015, Time: 20:03:57, ID: H5-15-WDM-214, Description: 1668A-CS#6-015B, Vial: Tray1:1

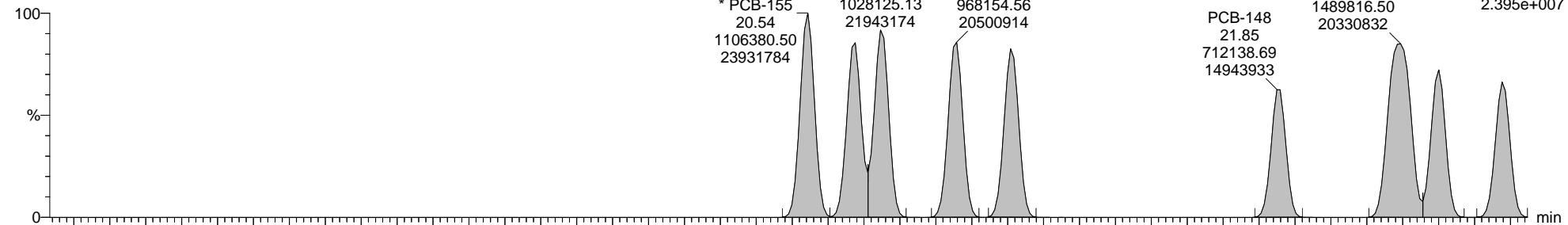
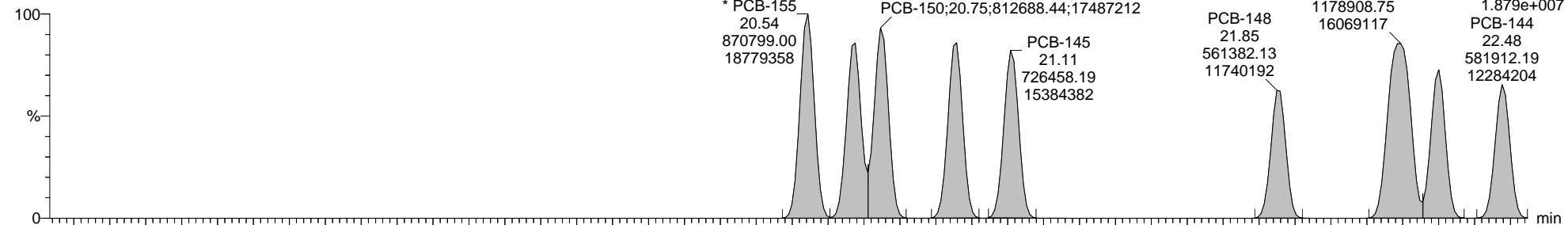
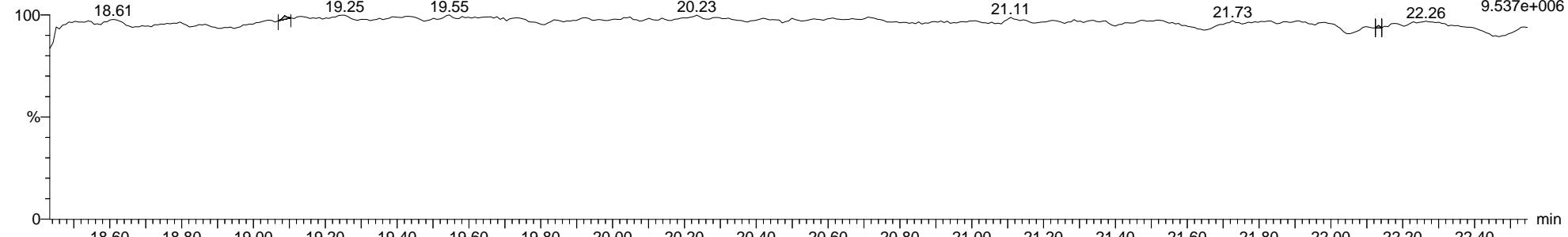
**13C-PCB-123**5-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-2145-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-2145-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-214

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-Q1.qld

Last Altered: Wednesday, November 11, 2015 20:13:55 Eastern Standard Time

Printed: Monday, November 30, 2015 16:17:54 Eastern Standard Time

Name: 5-150917B08, Date: 17-Sep-2015, Time: 20:03:57, ID: H5-15-WDM-214, Description: 1668A-CS#6-015B, Vial: Tray1:1

**\* PCB-155**5-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-2145-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-2145-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-214

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-Q1.qld

Last Altered: Wednesday, November 11, 2015 20:13:55 Eastern Standard Time

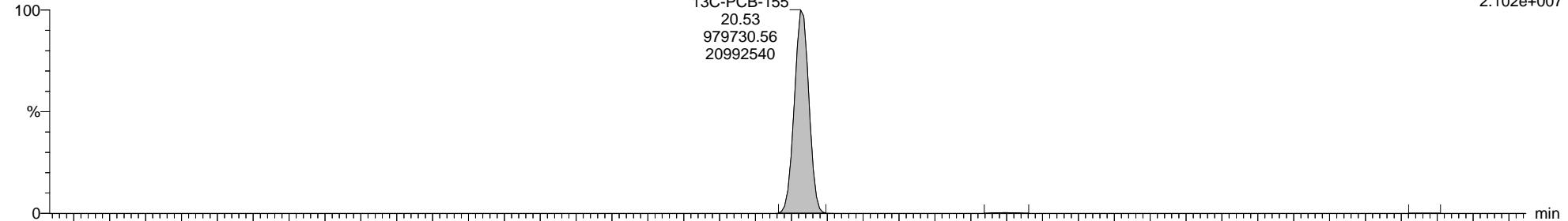
Printed: Monday, November 30, 2015 16:17:54 Eastern Standard Time

Name: 5-150917B08, Date: 17-Sep-2015, Time: 20:03:57, ID: H5-15-WDM-214, Description: 1668A-CS#6-015B, Vial: Tray1:1

### 13C-PCB-155

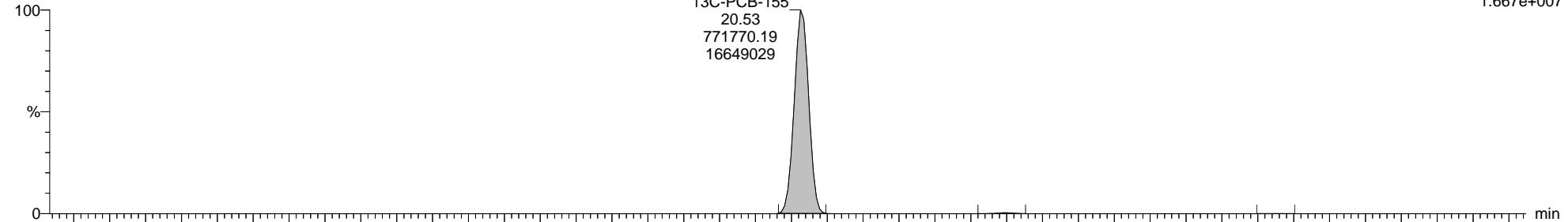
5-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-214

F4:Voltage SIR,EI+  
371.8817  
2.102e+007



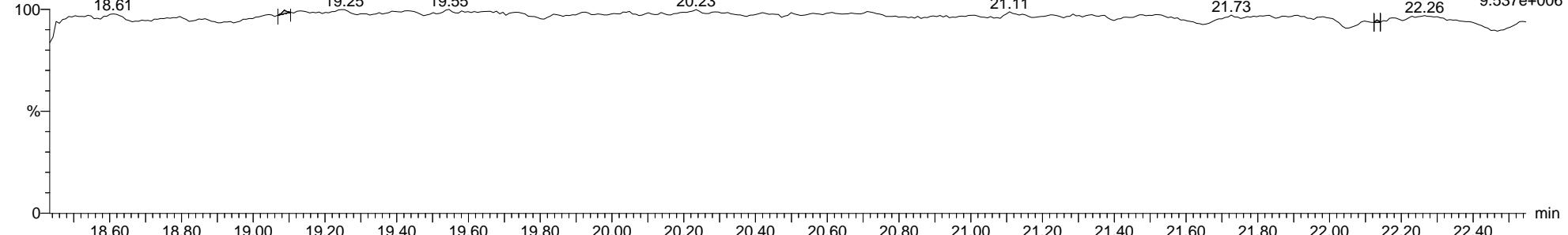
5-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-214

F4:Voltage SIR,EI+  
373.8789  
1.667e+007



5-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-214

F4:Voltage SIR,EI+  
330.9792  
9.537e+006

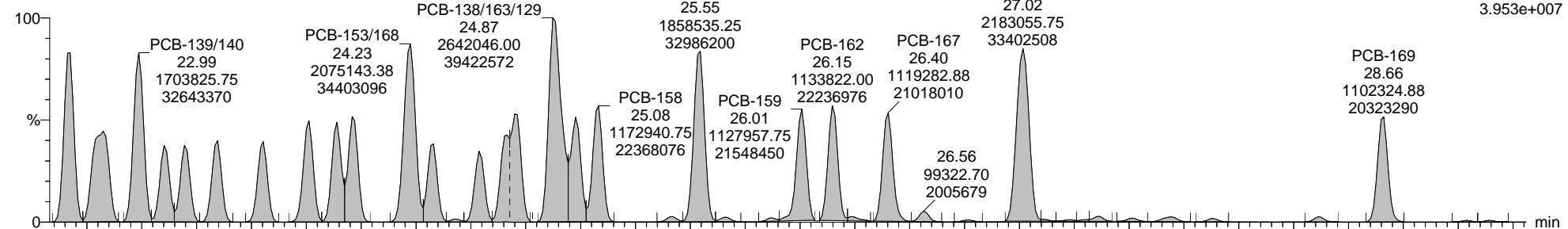
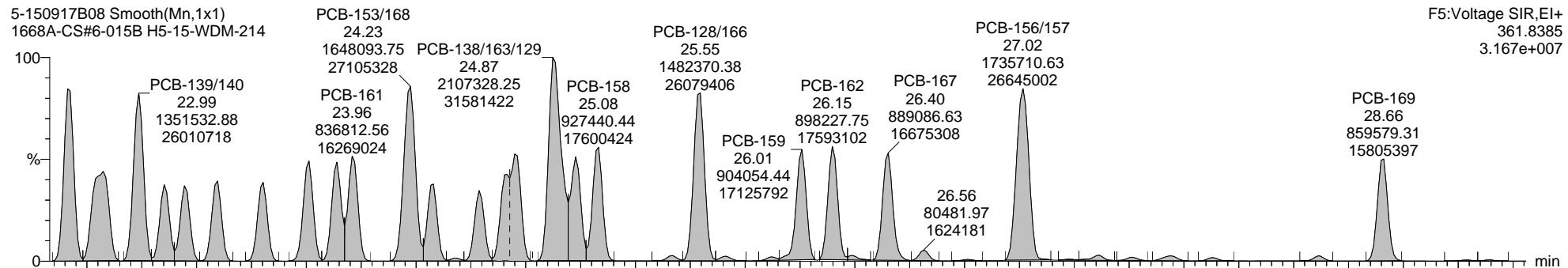
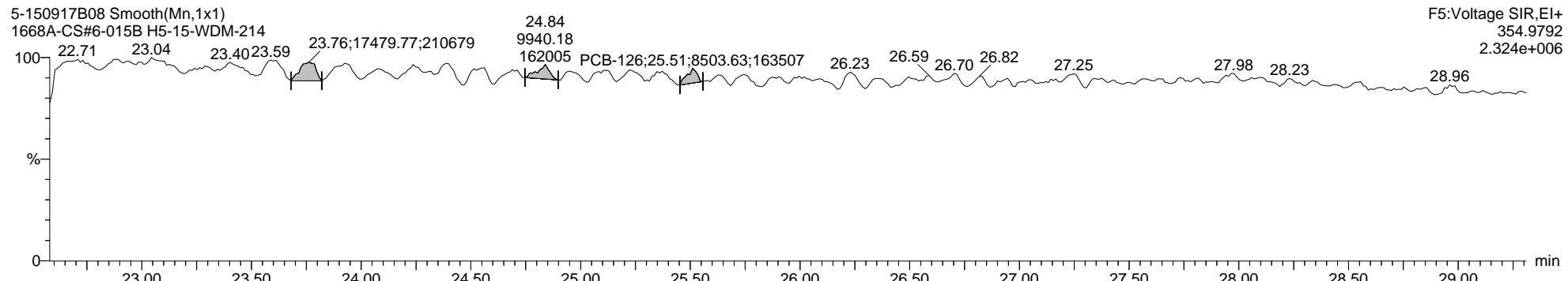


Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-Q1.qld

Last Altered: Wednesday, November 11, 2015 20:13:55 Eastern Standard Time

Printed: Monday, November 30, 2015 16:17:54 Eastern Standard Time

Name: 5-150917B08, Date: 17-Sep-2015, Time: 20:03:57, ID: H5-15-WDM-214, Description: 1668A-CS#6-015B, Vial: Tray1:1

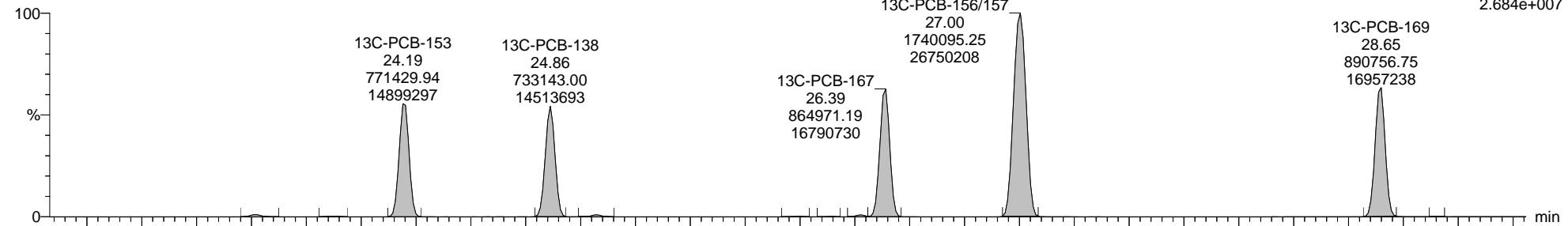
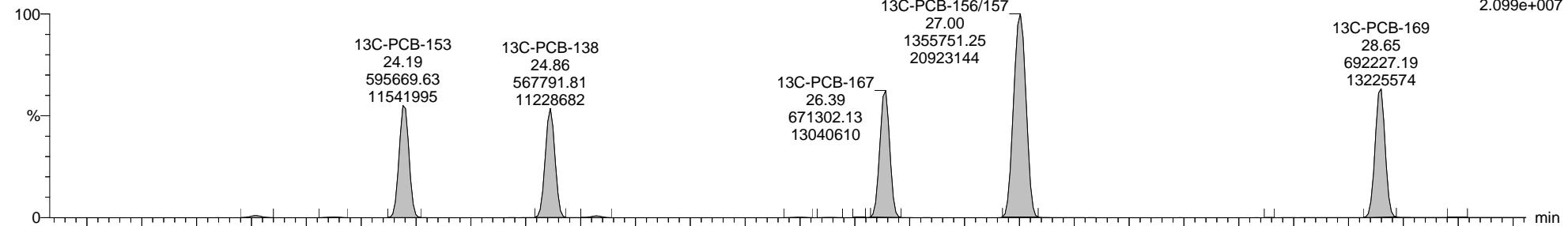
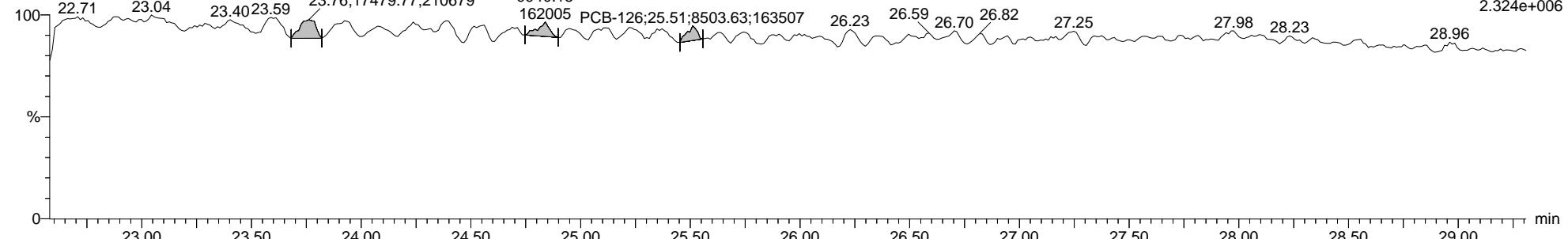
**PCB-167**5-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-2145-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-2145-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-214

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-Q1.qld

Last Altered: Wednesday, November 11, 2015 20:13:55 Eastern Standard Time

Printed: Monday, November 30, 2015 16:17:54 Eastern Standard Time

Name: 5-150917B08, Date: 17-Sep-2015, Time: 20:03:57, ID: H5-15-WDM-214, Description: 1668A-CS#6-015B, Vial: Tray1:1

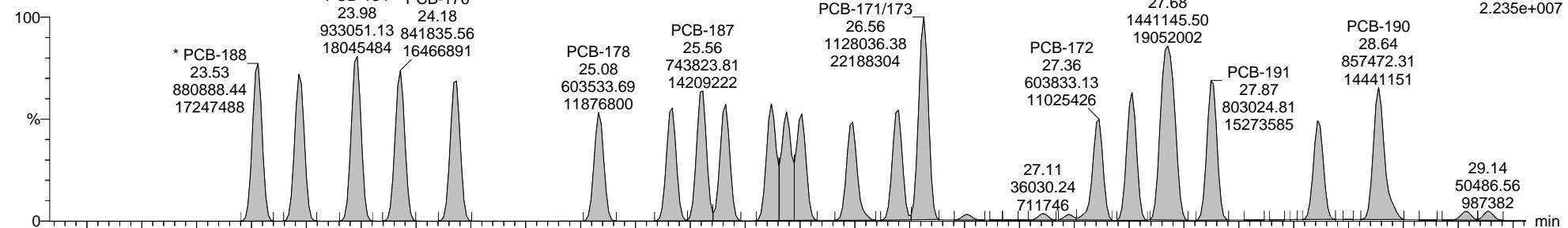
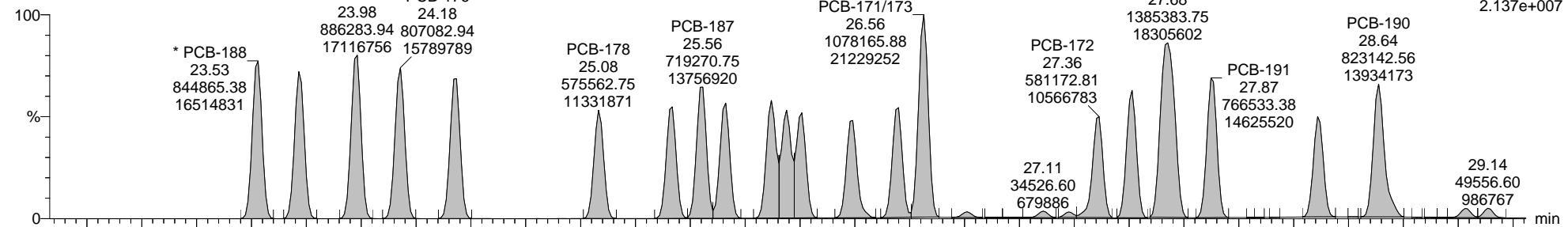
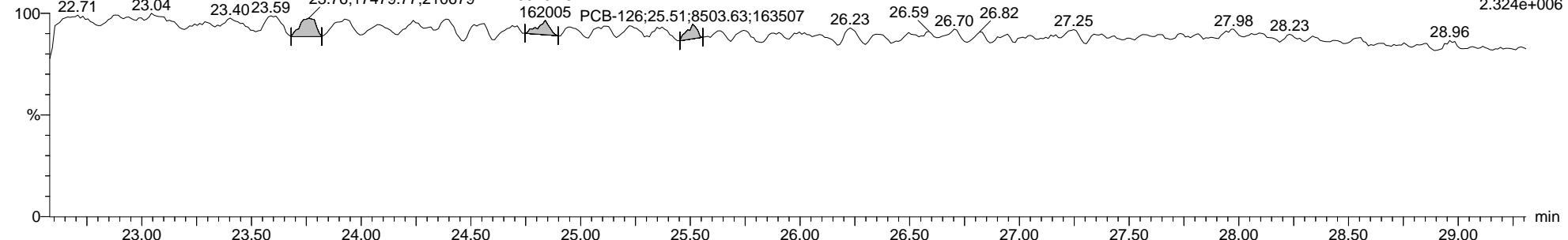
**13C-PCB-167**5-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-2145-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-2145-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-214

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-Q1.qld

Last Altered: Wednesday, November 11, 2015 20:13:55 Eastern Standard Time

Printed: Monday, November 30, 2015 16:17:54 Eastern Standard Time

Name: 5-150917B08, Date: 17-Sep-2015, Time: 20:03:57, ID: H5-15-WDM-214, Description: 1668A-CS#6-015B, Vial: Tray1:1

**\* PCB-188**5-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-2145-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-2145-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-214

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-Q1.qld

Last Altered: Wednesday, November 11, 2015 20:13:55 Eastern Standard Time

Printed: Monday, November 30, 2015 16:17:54 Eastern Standard Time

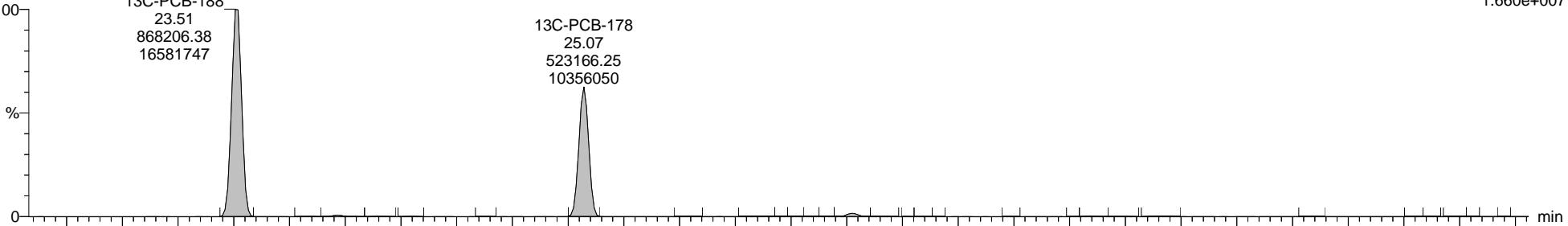
Name: 5-150917B08, Date: 17-Sep-2015, Time: 20:03:57, ID: H5-15-WDM-214, Description: 1668A-CS#6-015B, Vial: Tray1:1

**13C-PCB-188**

5-150917B08 Smooth(Mn,1x1)

1668A-CS#6-015B H5-15-WDM-214

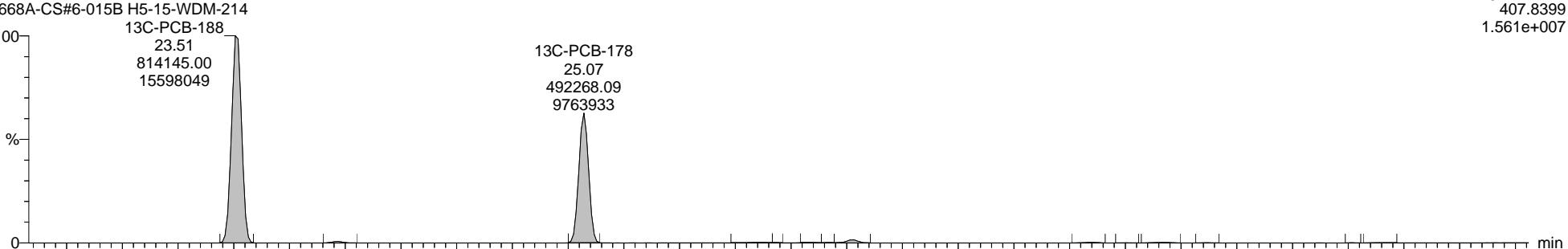
13C-PCB-188



5-150917B08 Smooth(Mn,1x1)

1668A-CS#6-015B H5-15-WDM-214

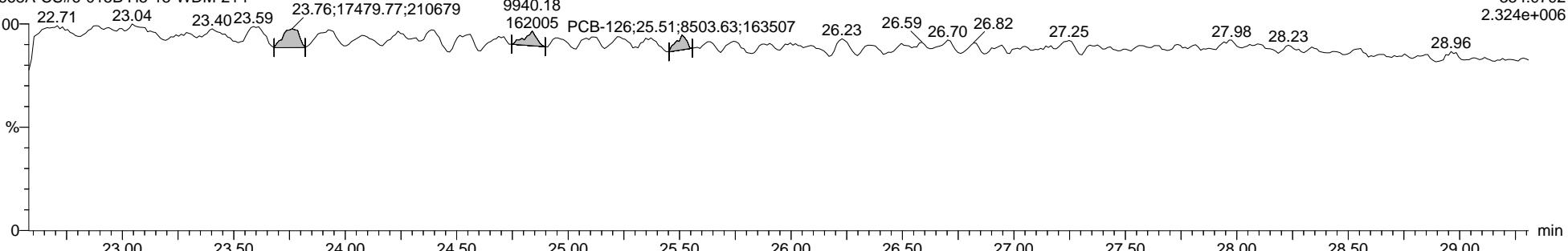
13C-PCB-188



5-150917B08 Smooth(Mn,1x1)

1668A-CS#6-015B H5-15-WDM-214

PCB-126;25.51;8503.63;163507

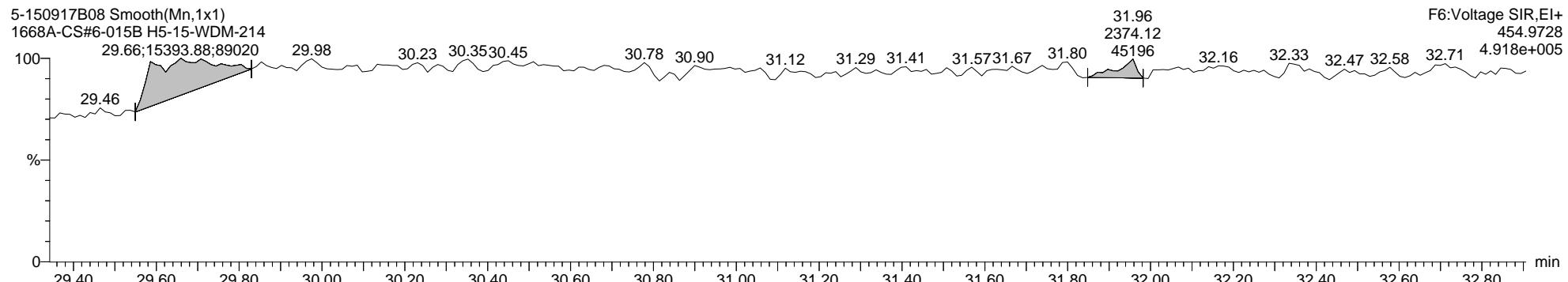
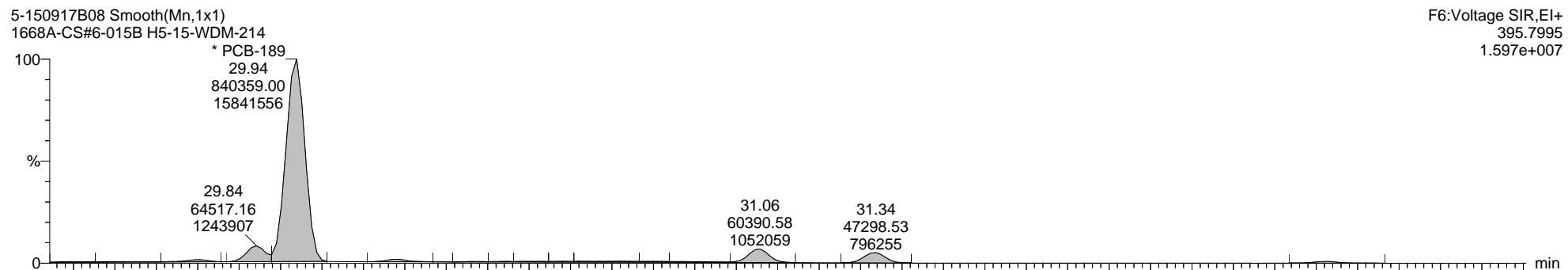
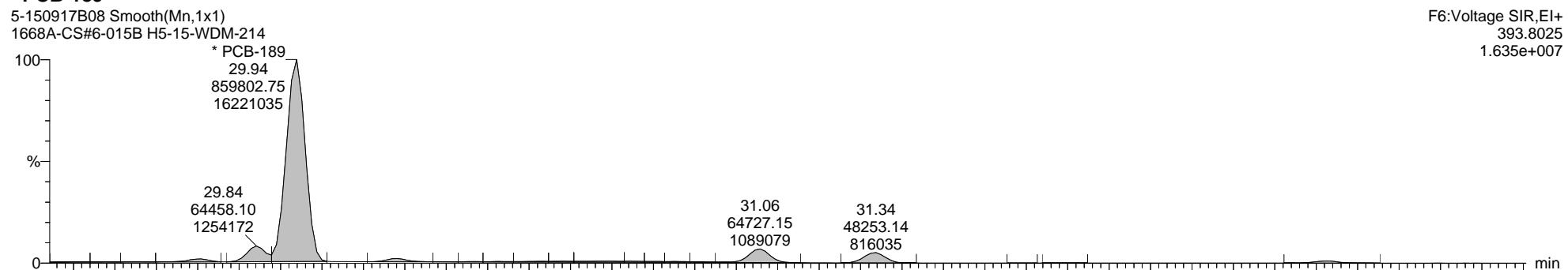


Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-Q1.qld

Last Altered: Wednesday, November 11, 2015 20:13:55 Eastern Standard Time

Printed: Monday, November 30, 2015 16:17:54 Eastern Standard Time

Name: 5-150917B08, Date: 17-Sep-2015, Time: 20:03:57, ID: H5-15-WDM-214, Description: 1668A-CS#6-015B, Vial: Tray1:1

**\* PCB-189**

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-Q1.qld

Last Altered: Wednesday, November 11, 2015 20:13:55 Eastern Standard Time

Printed: Monday, November 30, 2015 16:17:54 Eastern Standard Time

Name: 5-150917B08, Date: 17-Sep-2015, Time: 20:03:57, ID: H5-15-WDM-214, Description: 1668A-CS#6-015B, Vial: Tray1:1

**13C-PCB-189**

5-150917B08 Smooth(Mn,1x1)

1668A-CS#6-015B H5-15-WDM-214

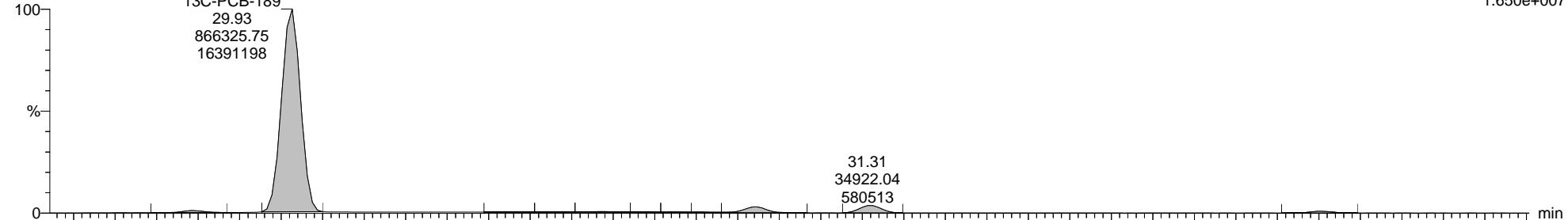
13C-PCB-189

29.93  
866325.75  
16391198

F6:Voltage SIR,EI+

405.8428

1.650e+007



5-150917B08 Smooth(Mn,1x1)

1668A-CS#6-015B H5-15-WDM-214

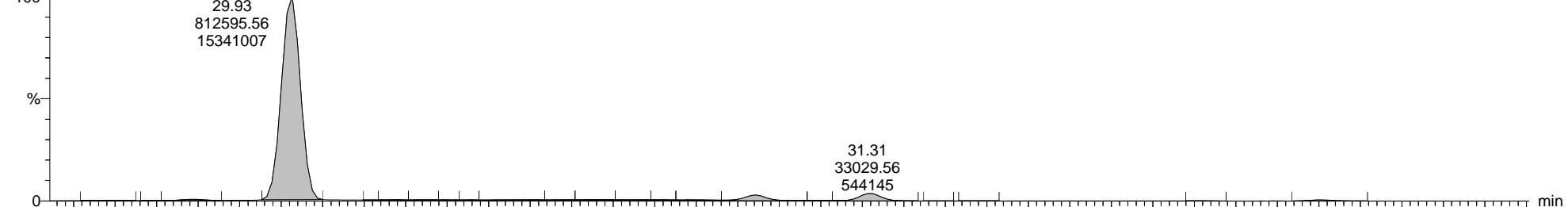
13C-PCB-189

29.93  
812595.56  
15341007

F6:Voltage SIR,EI+

407.8399

1.544e+007



5-150917B08 Smooth(Mn,1x1)

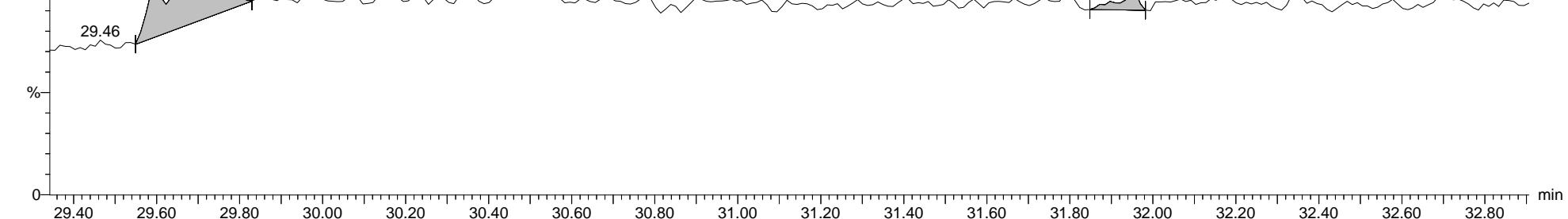
1668A-CS#6-015B H5-15-WDM-214

13C-PCB-189

29.66;15393.88;89020  
29.98

F6:Voltage SIR,EI+

454.9728

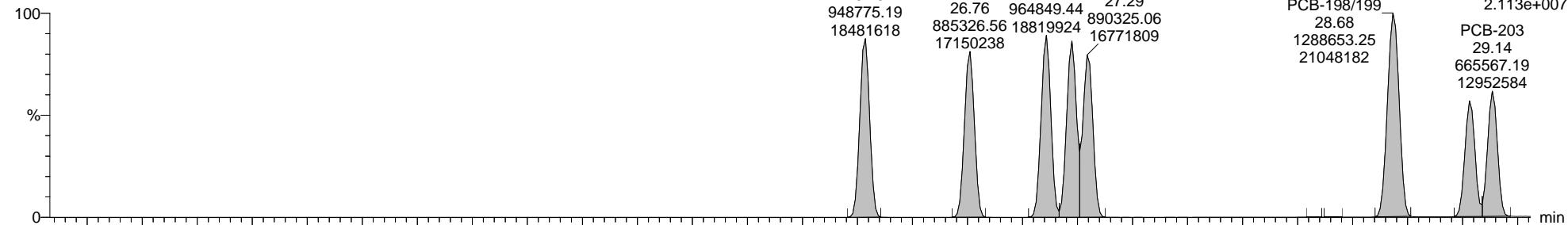
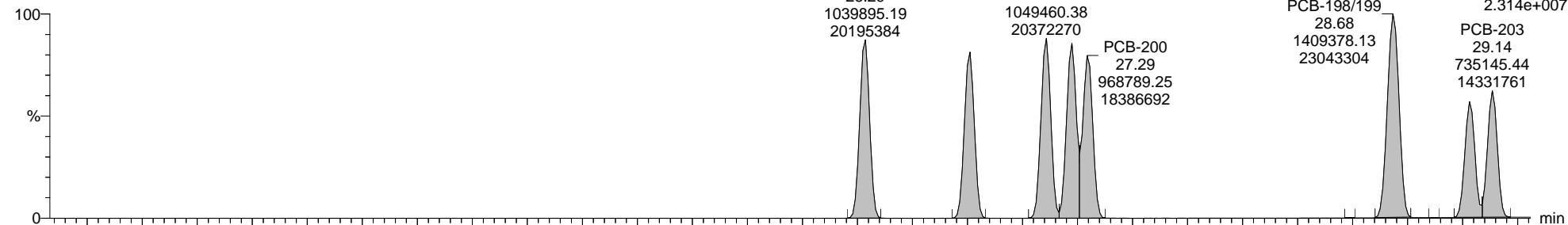
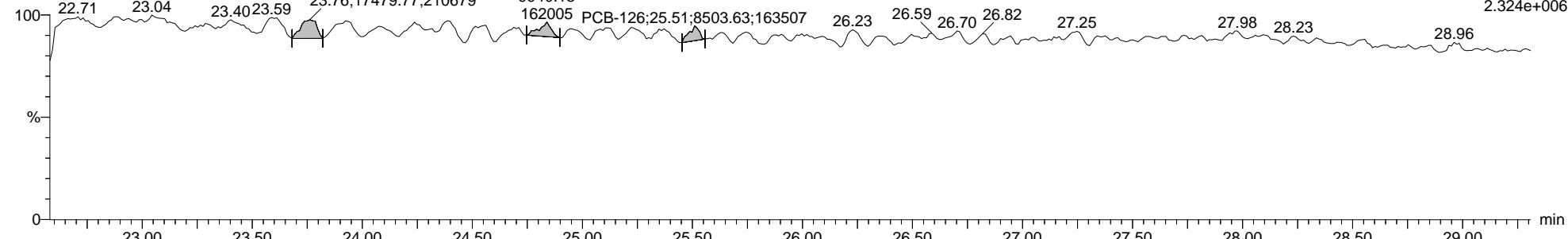


Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-Q1.qld

Last Altered: Wednesday, November 11, 2015 20:13:55 Eastern Standard Time

Printed: Monday, November 30, 2015 16:17:54 Eastern Standard Time

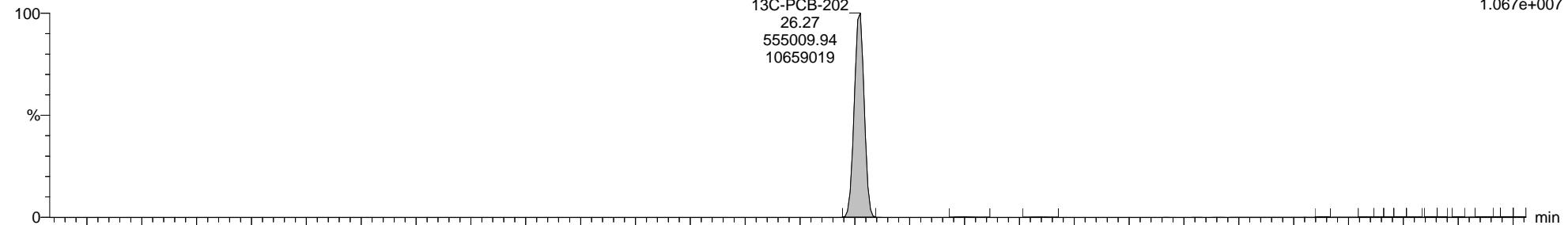
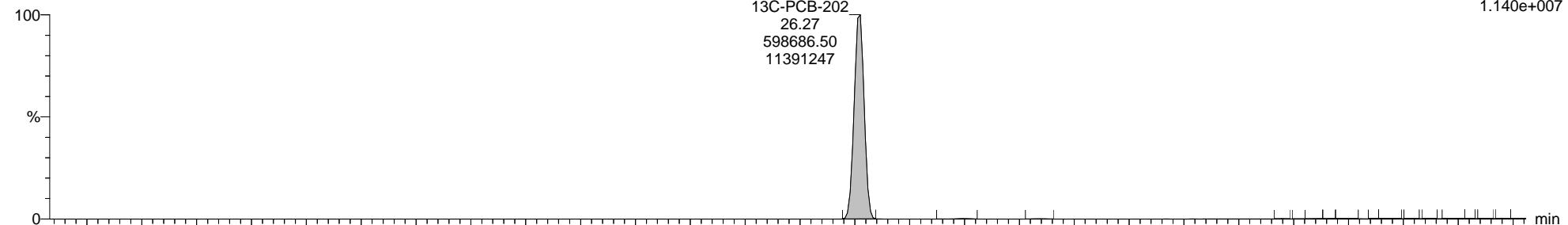
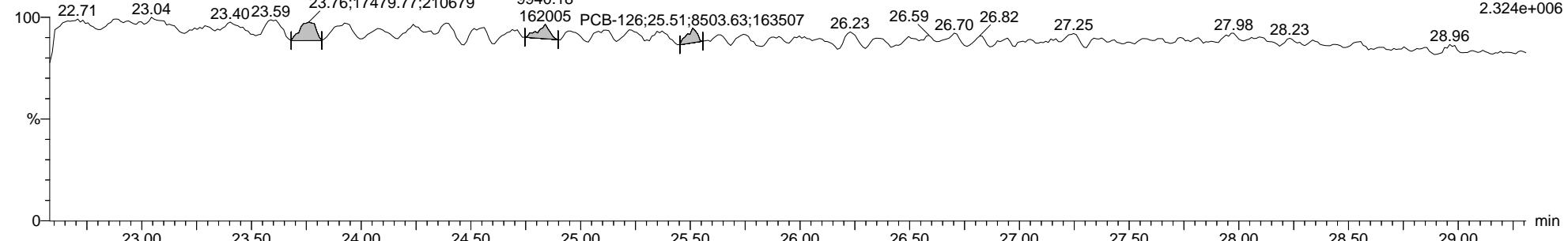
Name: 5-150917B08, Date: 17-Sep-2015, Time: 20:03:57, ID: H5-15-WDM-214, Description: 1668A-CS#6-015B, Vial: Tray1:1

**\* PCB-202**5-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-2145-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-2145-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-214

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-Q1.qld

Last Altered: Wednesday, November 11, 2015 20:13:55 Eastern Standard Time

Printed: Monday, November 30, 2015 16:17:54 Eastern Standard Time

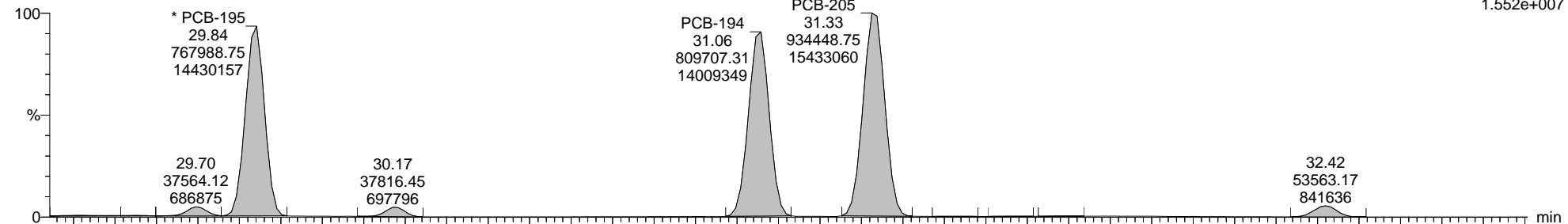
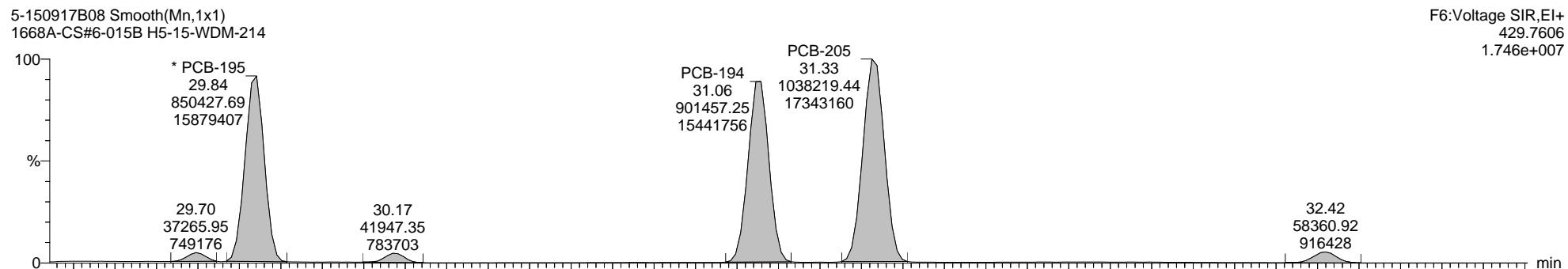
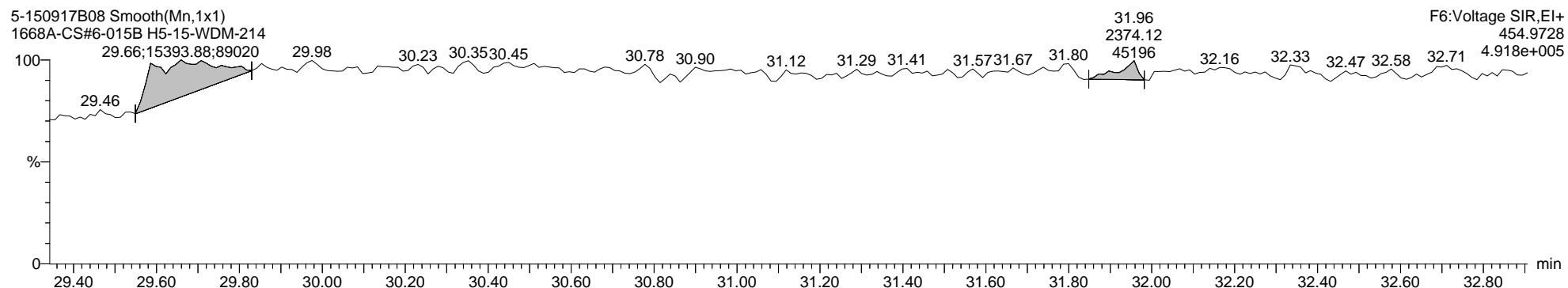
**Name: 5-150917B08, Date: 17-Sep-2015, Time: 20:03:57, ID: H5-15-WDM-214, Description: 1668A-CS#6-015B, Vial: Tray1:1****13C-PCB-202**5-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-2145-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-2145-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-214

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-Q1.qld

Last Altered: Wednesday, November 11, 2015 20:13:55 Eastern Standard Time

Printed: Monday, November 30, 2015 16:17:54 Eastern Standard Time

Name: 5-150917B08, Date: 17-Sep-2015, Time: 20:03:57, ID: H5-15-WDM-214, Description: 1668A-CS#6-015B, Vial: Tray1:1

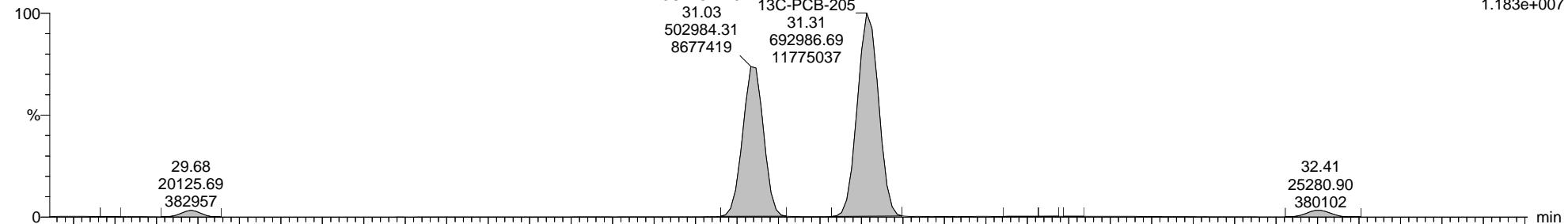
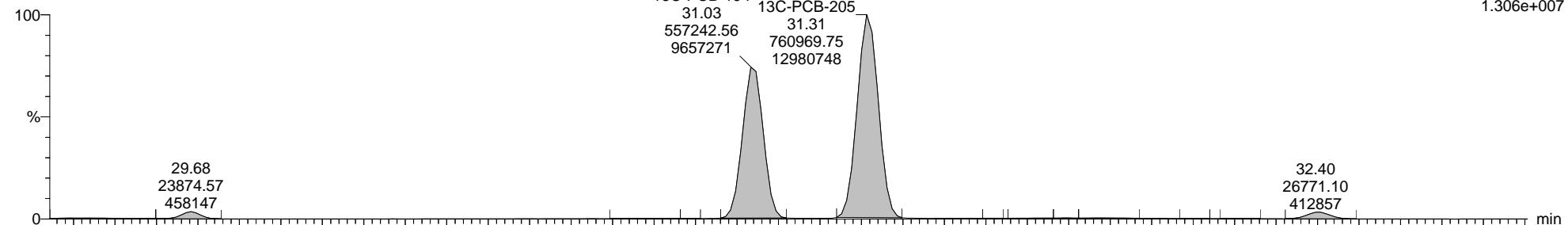
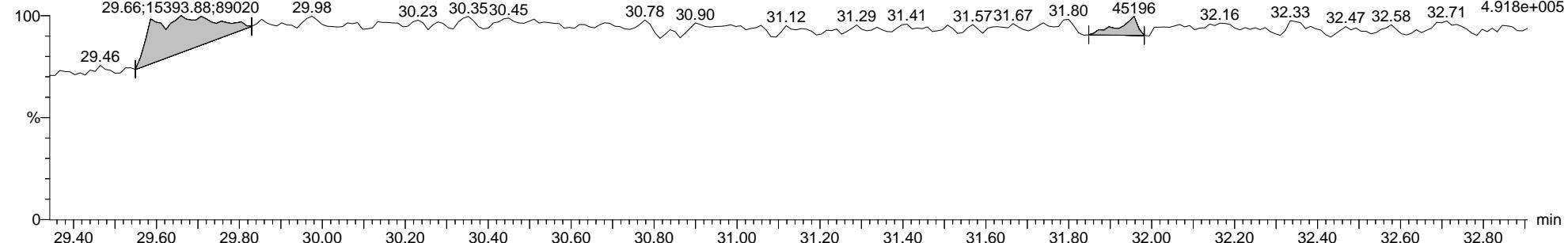
**\* PCB-195**5-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-2145-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-2145-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-214

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-Q1.qld

Last Altered: Wednesday, November 11, 2015 20:13:55 Eastern Standard Time

Printed: Monday, November 30, 2015 16:17:54 Eastern Standard Time

Name: 5-150917B08, Date: 17-Sep-2015, Time: 20:03:57, ID: H5-15-WDM-214, Description: 1668A-CS#6-015B, Vial: Tray1:1

**13C-PCB-205**5-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-2145-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-2145-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-214

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-Q1.qld

Last Altered: Wednesday, November 11, 2015 20:13:55 Eastern Standard Time

Printed: Monday, November 30, 2015 16:17:54 Eastern Standard Time

Name: 5-150917B08, Date: 17-Sep-2015, Time: 20:03:57, ID: H5-15-WDM-214, Description: 1668A-CS#6-015B, Vial: Tray1:1

**\* PCB-208**5-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-214

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-Q1.qld

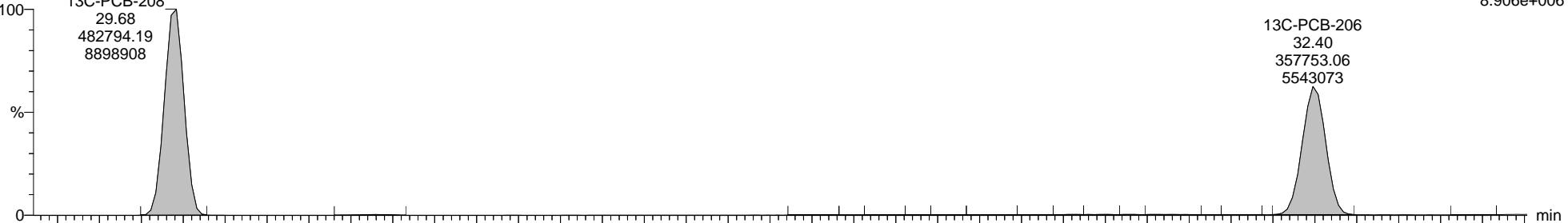
Last Altered: Wednesday, November 11, 2015 20:13:55 Eastern Standard Time

Printed: Monday, November 30, 2015 16:17:54 Eastern Standard Time

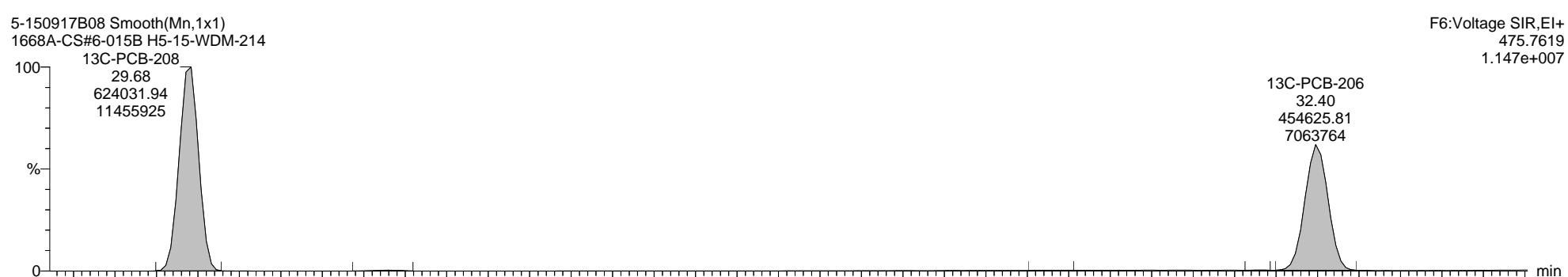
Name: 5-150917B08, Date: 17-Sep-2015, Time: 20:03:57, ID: H5-15-WDM-214, Description: 1668A-CS#6-015B, Vial: Tray1:1

**13C-PCB-208**5-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-214

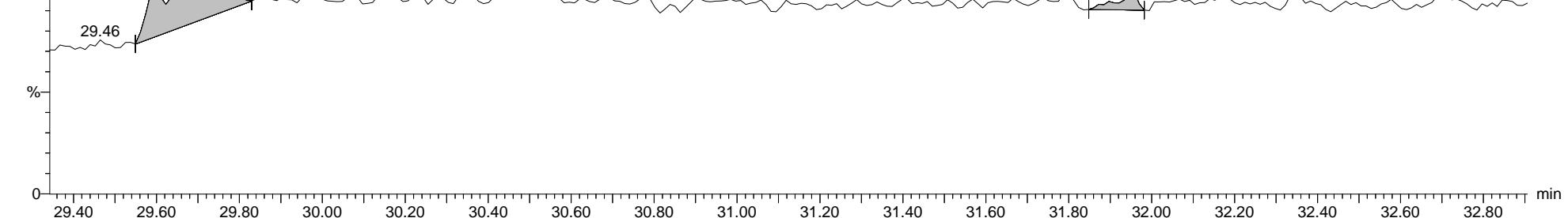
13C-PCB-208

29.68  
482794.19  
8898908F6:Voltage SIR,EI+  
473.7648  
8.906e+0065-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-214

13C-PCB-208

29.68  
624031.94  
11455925F6:Voltage SIR,EI+  
475.7619  
1.147e+0075-150917B08 Smooth(Mn,1x1)  
1668A-CS#6-015B H5-15-WDM-214

29.66;15393.88;89020

F6:Voltage SIR,EI+  
454.9728  
4.918e+005

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-Q1.qld

Last Altered: Wednesday, November 11, 2015 20:13:55 Eastern Standard Time

Printed: Monday, November 30, 2015 16:17:54 Eastern Standard Time

Name: 5-150917B08, Date: 17-Sep-2015, Time: 20:03:57, ID: H5-15-WDM-214, Description: 1668A-CS#6-015B, Vial: Tray1:1

\* PCB-209

5-150917B08 Smooth(Mn,1x1)

1668A-CS#6-015B H5-15-WDM-214

\* PCB-209

33.56

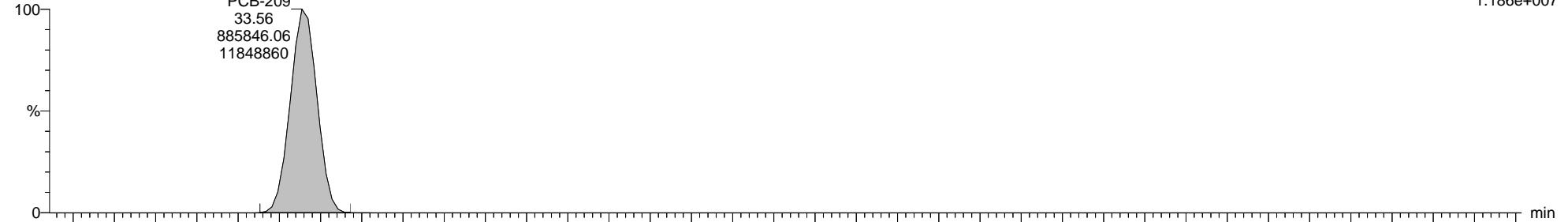
885846.06

11848860

F7:Voltage SIR,EI+

497.6826

1.186e+007



5-150917B08 Smooth(Mn,1x1)

1668A-CS#6-015B H5-15-WDM-214

\* PCB-209

33.56

751780.06

10175541

F7:Voltage SIR,EI+

499.6797

1.020e+007



5-150917B08 Smooth(Mn,1x1)

1668A-CS#6-015B H5-15-WDM-214

32.99

34.09

34.95

35.44

35.57

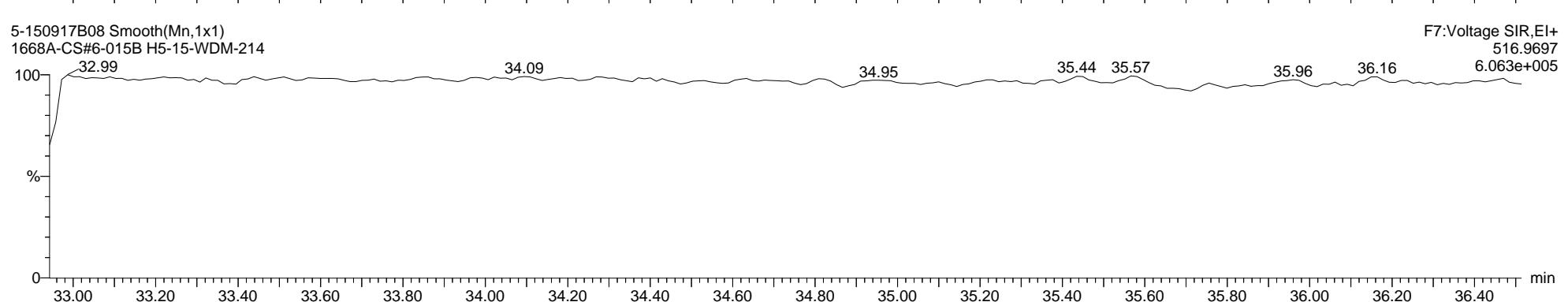
35.96

36.16

F7:Voltage SIR,EI+

516.9697

6.063e+005



Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-Q1.qld

Last Altered: Wednesday, November 11, 2015 20:13:55 Eastern Standard Time

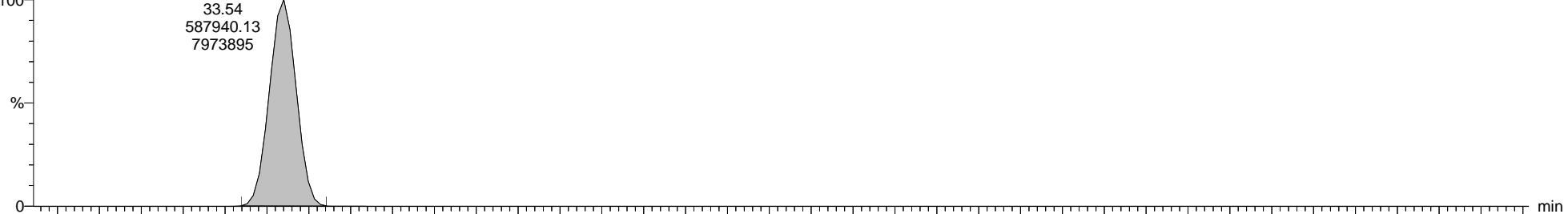
Printed: Monday, November 30, 2015 16:17:54 Eastern Standard Time

**Name: 5-150917B08, Date: 17-Sep-2015, Time: 20:03:57, ID: H5-15-WDM-214, Description: 1668A-CS#6-015B, Vial: Tray1:1****13C-PCB-209**

5-150917B08 Smooth(Mn,1x1)

1668A-CS#6-015B H5-15-WDM-214

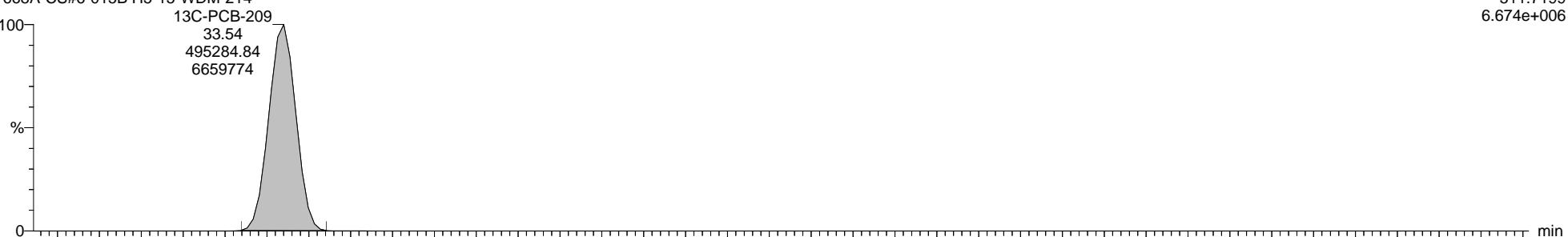
13C-PCB-209



5-150917B08 Smooth(Mn,1x1)

1668A-CS#6-015B H5-15-WDM-214

13C-PCB-209

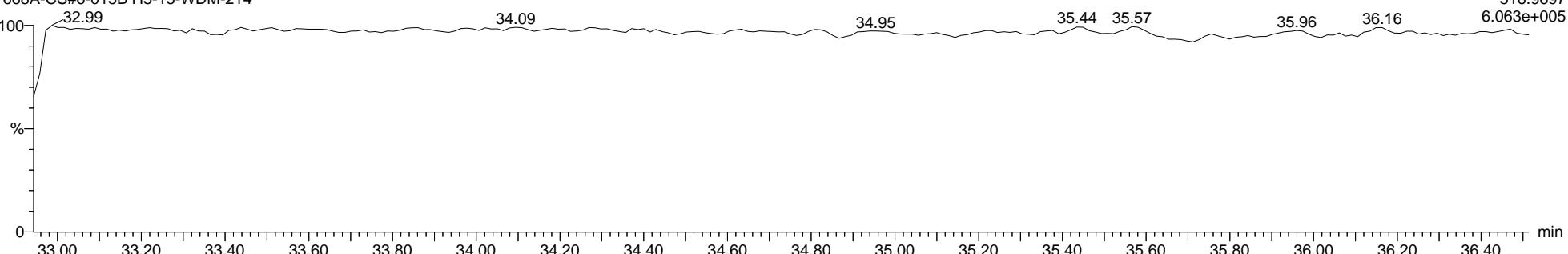


5-150917B08 Smooth(Mn,1x1)

1668A-CS#6-015B H5-15-WDM-214

F7:Voltage SIR,EI+

516.9697



**Quantify Audit Report MassLynx MassLynx V4.1 SCN 901**

Dataset: C:\MassLynx\PCB.PRO\Results\5-150917B-Q1.qld

Last Altered: Wednesday, November 11, 2015 20:13:55 Eastern Standard Time

Printed: Monday, November 30, 2015 16:17:54 Eastern Standard Time

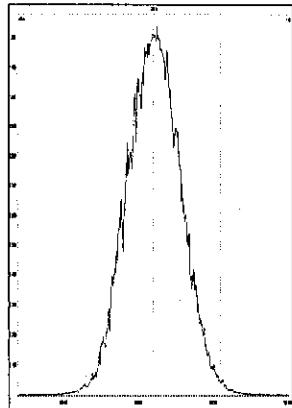
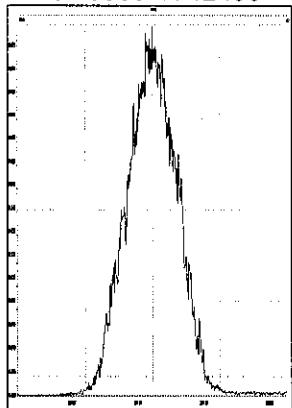
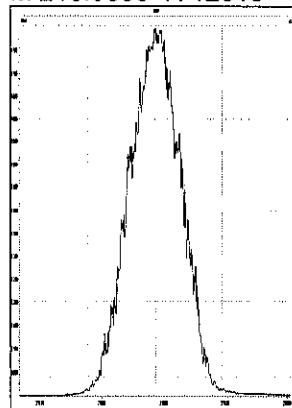
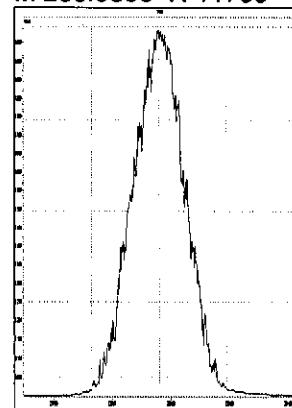
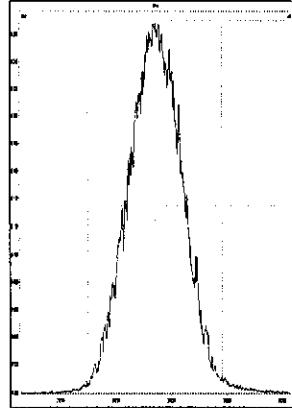
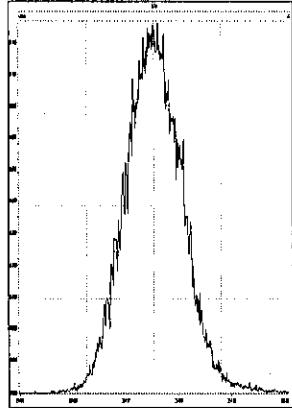
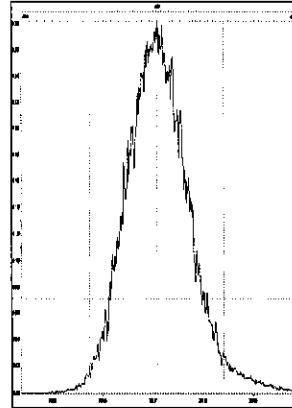
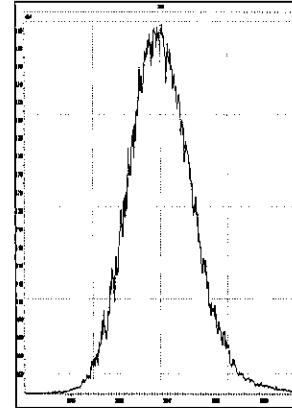
Date	Time	Event	Details	Comments
11-Nov-15	20:04:31	Process Extract		
11-Nov-15	20:04:31	Process Integrate		
11-Nov-15	20:04:32	Process Calibrate		
11-Nov-15	20:04:32	Process Quantify		
11-Nov-15	20:04:32	Dataset Created		
11-Nov-15	20:05:24	Peak deleted	Sample:5-150917B08, Compound:TeCB-F3, RT:18.046	
11-Nov-15	20:05:24	Peak deleted	Sample:5-150917B08, Compound:TeCB-F3, RT:18.103	
11-Nov-15	20:05:24	Peak deleted	Sample:5-150917B08, Compound:TeCB-F3, RT:18.103	
11-Nov-15	20:05:24	Peak deleted	Sample:5-150917B08, Compound:TeCB-F3, RT:18.046	
11-Nov-15	20:05:34	Peak modified	Sample:5-150917B08, Compound:TeCB-F3, RT:18.103	
11-Nov-15	20:05:34	Peak modified	Sample:5-150917B08, Compound:TeCB-F3, RT:18.103	
11-Nov-15	20:06:20	Peak deleted	Sample:5-150917B08, Compound:PeCB-F4, RT:19.307	
11-Nov-15	20:06:20	Peak deleted	Sample:5-150917B08, Compound:PeCB-F4, RT:19.228	
11-Nov-15	20:06:20	Peak deleted	Sample:5-150917B08, Compound:PeCB-F4, RT:19.351	
11-Nov-15	20:06:20	Peak deleted	Sample:5-150917B08, Compound:PeCB-F4, RT:19.351	
11-Nov-15	20:06:20	Peak deleted	Sample:5-150917B08, Compound:PeCB-F4, RT:19.307	
11-Nov-15	20:06:20	Peak deleted	Sample:5-150917B08, Compound:PeCB-F4, RT:19.237	
11-Nov-15	20:06:43	Peak modified	Sample:5-150917B08, Compound:PeCB-F4, RT:19.228	
11-Nov-15	20:06:43	Peak modified	Sample:5-150917B08, Compound:PeCB-F4, RT:19.237	
11-Nov-15	20:07:28	Peak modified	Sample:5-150917B08, Compound:PeCB-F4, RT:19.228	
11-Nov-15	20:07:28	Peak modified	Sample:5-150917B08, Compound:PeCB-F4, RT:19.237	
11-Nov-15	20:07:47	Peak modified	Sample:5-150917B08, Compound:PeCB-F4, RT:19.228	
11-Nov-15	20:07:47	Peak modified	Sample:5-150917B08, Compound:PeCB-F4, RT:19.237	
11-Nov-15	20:08:42	Peak deleted	Sample:5-150917B08, Compound:PeCB-F4, RT:20.967	
11-Nov-15	20:08:42	Peak deleted	Sample:5-150917B08, Compound:PeCB-F4, RT:20.923	
11-Nov-15	20:08:42	Peak deleted	Sample:5-150917B08, Compound:PeCB-F4, RT:20.967	
11-Nov-15	20:08:42	Peak deleted	Sample:5-150917B08, Compound:PeCB-F4, RT:20.923	
11-Nov-15	20:08:53	Peak modified	Sample:5-150917B08, Compound:PeCB-F4, RT:20.967	
11-Nov-15	20:08:53	Peak modified	Sample:5-150917B08, Compound:PeCB-F4, RT:20.967	
11-Nov-15	20:11:39	Method modified		
11-Nov-15	20:11:47	Process Calibrate		
11-Nov-15	20:11:47	Process Quantify		
11-Nov-15	20:12:34	Peak deleted	Sample:5-150917B08, Compound:PeCB-F4, RT:21.576	
11-Nov-15	20:12:34	Peak deleted	Sample:5-150917B08, Compound:PeCB-F4, RT:21.647	
11-Nov-15	20:12:34	Peak deleted	Sample:5-150917B08, Compound:PeCB-F4, RT:21.709	
11-Nov-15	20:12:34	Peak deleted	Sample:5-150917B08, Compound:PeCB-F4, RT:21.762	
11-Nov-15	20:12:34	Peak deleted	Sample:5-150917B08, Compound:PeCB-F4, RT:21.585	
11-Nov-15	20:12:34	Peak deleted	Sample:5-150917B08, Compound:PeCB-F4, RT:21.647	
11-Nov-15	20:12:34	Peak deleted	Sample:5-150917B08, Compound:PeCB-F4, RT:21.709	
11-Nov-15	20:12:34	Peak deleted	Sample:5-150917B08, Compound:PeCB-F4, RT:21.762	
11-Nov-15	20:12:49	Peak modified	Sample:5-150917B08, Compound:PeCB-F4, RT:21.647	
11-Nov-15	20:12:49	Peak modified	Sample:5-150917B08, Compound:PeCB-F4, RT:21.647	
11-Nov-15	20:13:42	Peak deleted	Sample:5-150917B08, Compound:HxCB-F5, RT:24.665	
11-Nov-15	20:13:42	Peak deleted	Sample:5-150917B08, Compound:HxCB-F5, RT:24.700	
11-Nov-15	20:13:42	Peak deleted	Sample:5-150917B08, Compound:HxCB-F5, RT:24.665	
11-Nov-15	20:13:42	Peak deleted	Sample:5-150917B08, Compound:HxCB-F5, RT:24.700	
11-Nov-15	20:13:54	Peak modified	Sample:5-150917B08, Compound:HxCB-F5, RT:24.700	
11-Nov-15	20:13:54	Peak modified	Sample:5-150917B08, Compound:HxCB-F5, RT:24.700	
11-Nov-15	20:15:43	Dataset Saved	Saved to 'C:\MassLynx\PCB.PRO\Results\5-150917B-Q1.qld'	

**Experiment Calibration Report****MassLynx 4.1 SCN815 SCN795**

Page 1 of 1

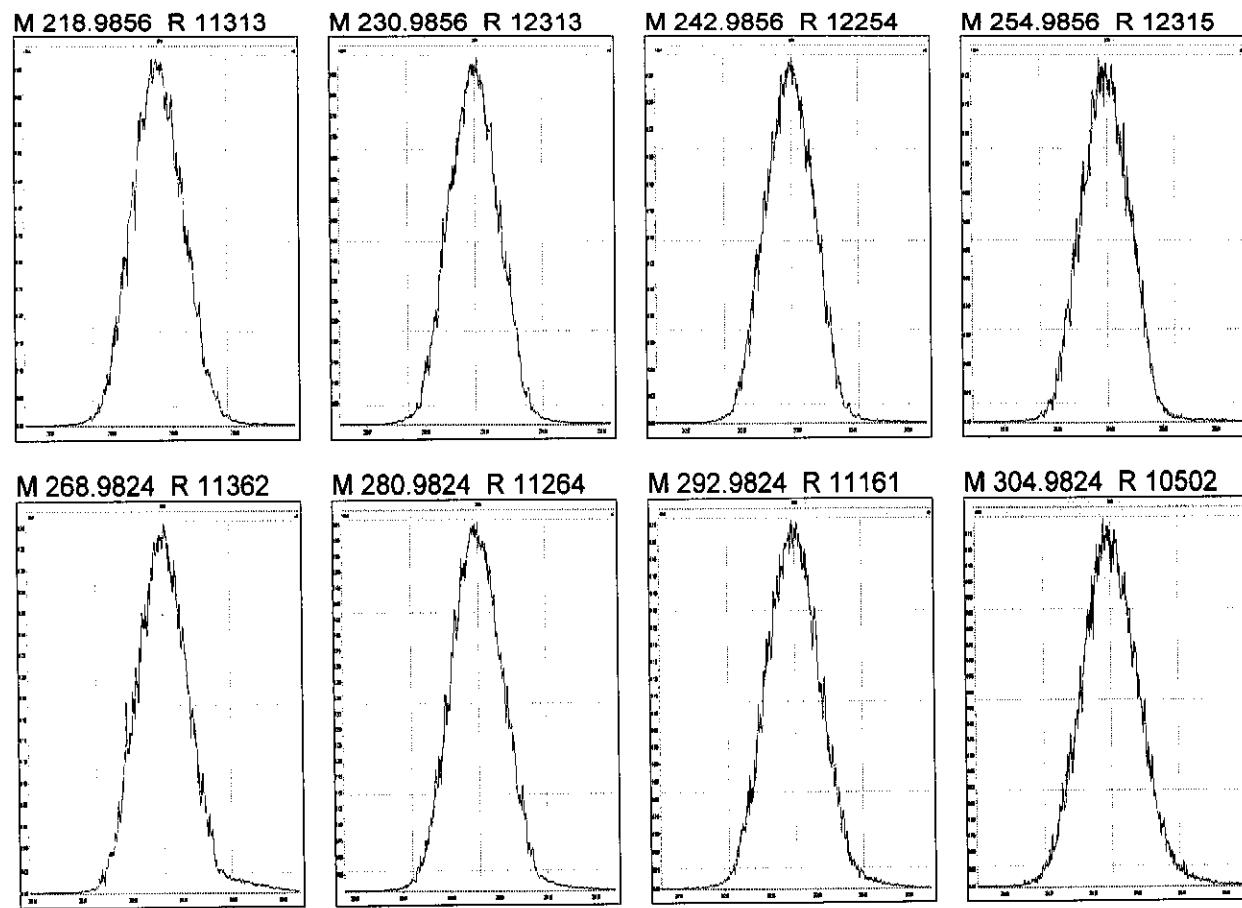
File: Experiment: 1668\_octyl\_1.exp Reference: Pfk\_193.ref Function: 1 @ 200 (ppm)

Printed: Thursday, September 17, 2015 15:01:16 Eastern Daylight Time

**M 180.9888 R 11262****M 204.9888 R 12436****M 218.9856 R 12015****M 230.9856 R 11735****M 242.9856 R 10868****M 254.9856 R 10460****M 268.9824 R 9195****M 280.9824 R 9192**

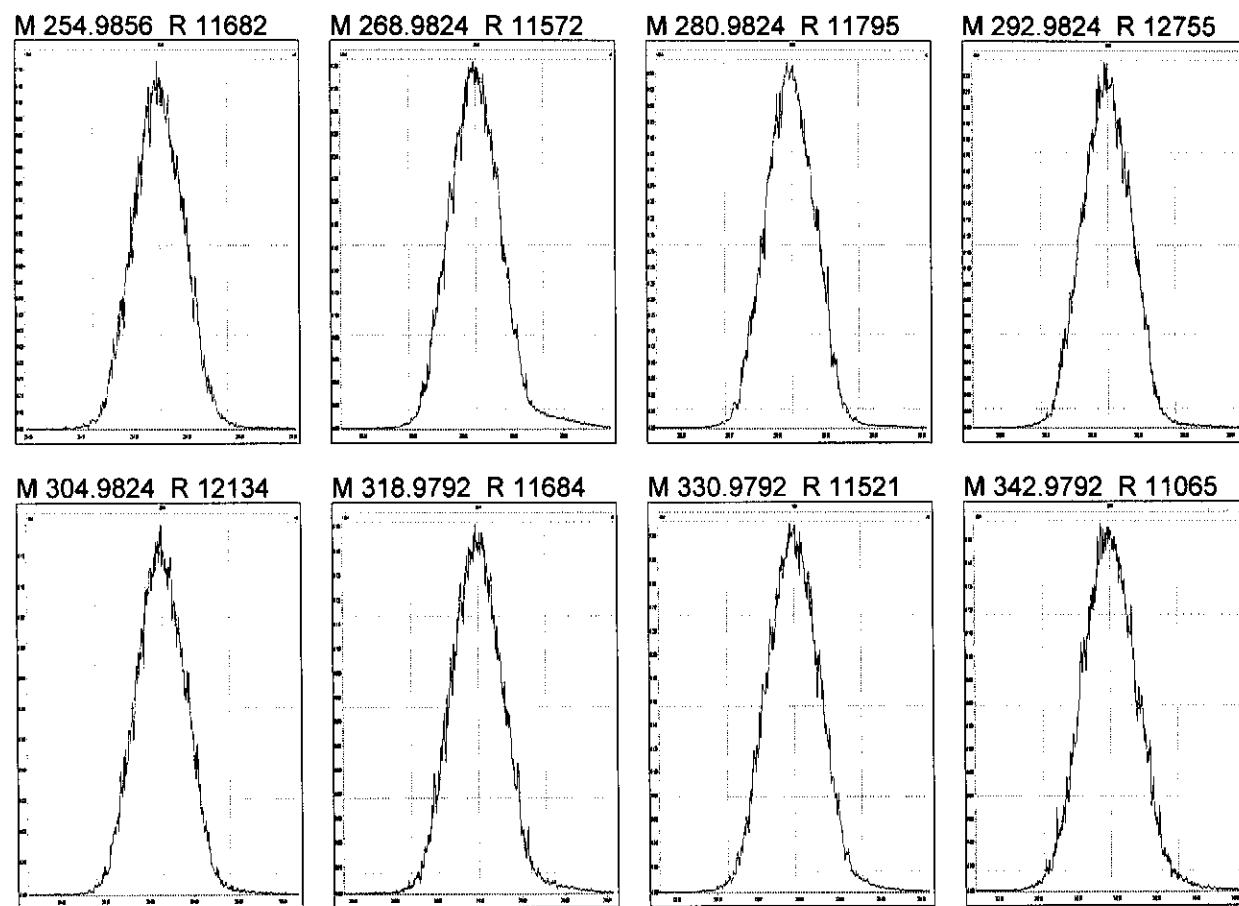
File: Experiment: 1668\_octyl\_1.exp Reference: Pfk\_193.ref Function: 2 @ 200 (ppm)

Printed: Thursday, September 17, 2015 15:01:34 Eastern Daylight Time



File: Experiment: 1668\_octyl\_1.exp Reference: Pfk\_193.ref Function: 3 @ 200 (ppm)

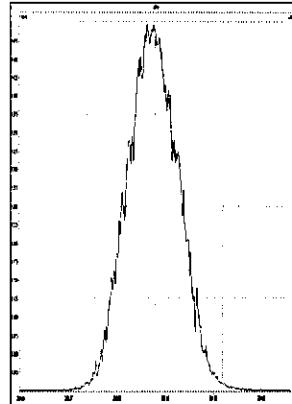
Printed: Thursday, September 17, 2015 15:01:52 Eastern Daylight Time



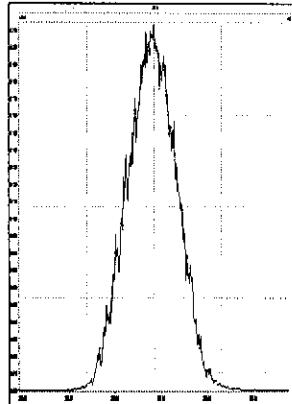
File: Experiment: 1668\_octyl\_1.exp Reference: Pfk\_193.ref Function: 4 @ 200 (ppm)

Printed: Thursday, September 17, 2015 15:02:12 Eastern Daylight Time

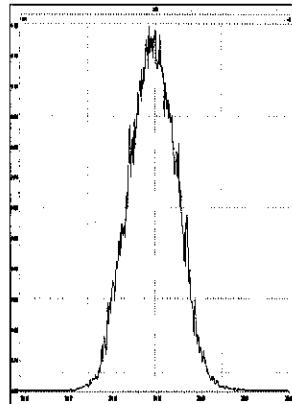
M 280.9824 R 11901



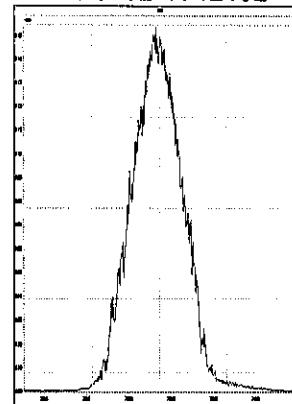
M 292.9824 R 12195



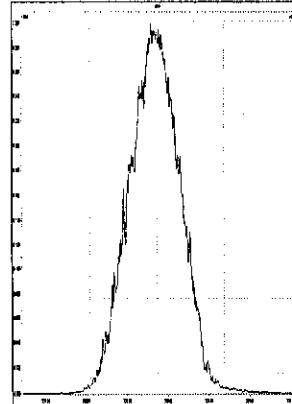
M 304.9824 R 12075



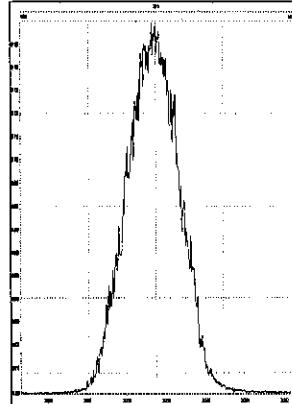
M 318.9792 R 12192



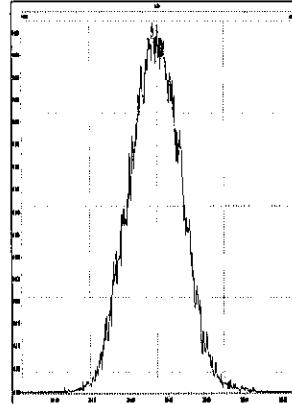
M 330.9792 R 12020



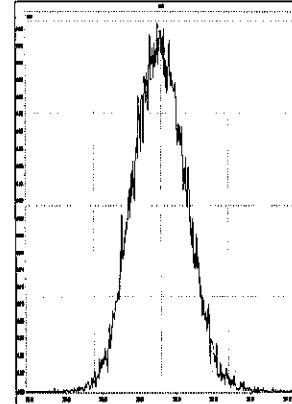
M 342.9792 R 12018



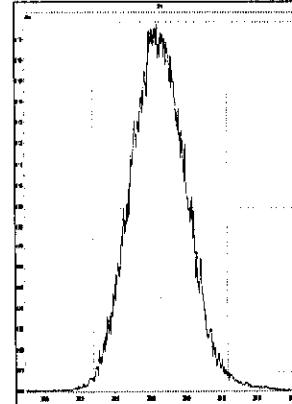
M 354.9792 R 11684



M 366.9792 R 11415



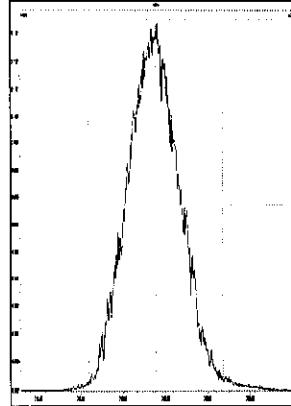
M 380.9760 R 10547



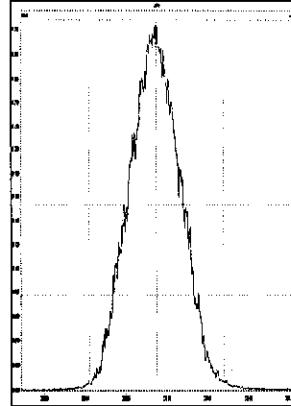
File: Experiment: 1668\_octyl\_1.exp Reference: Pfk\_193.ref Function: 5 @ 200 (ppm)

Printed: Thursday, September 17, 2015 15:02:35 Eastern Daylight Time

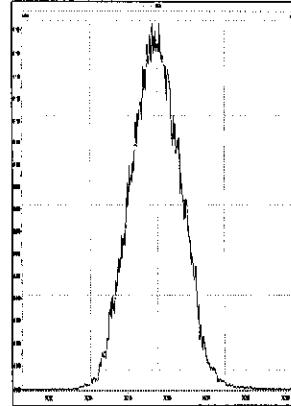
M 318.9792 R 11262



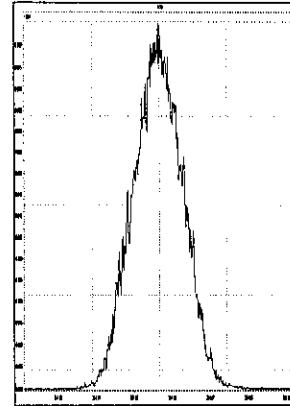
M 330.9792 R 12024



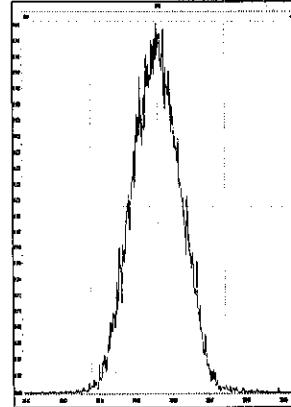
M 342.9792 R 11851



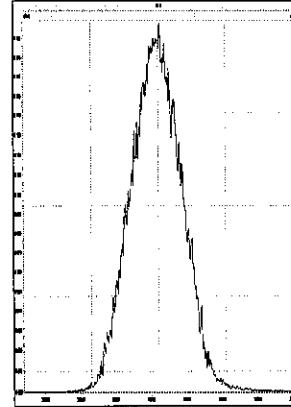
M 354.9792 R 12137



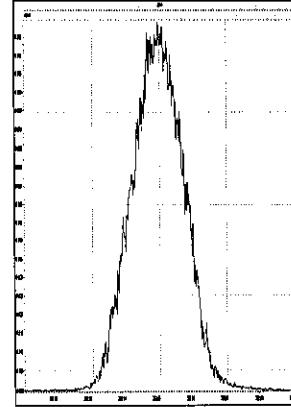
M 366.9792 R 12499



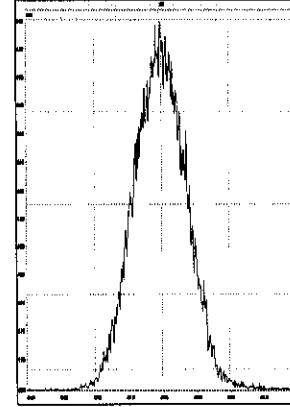
M 380.9760 R 12198



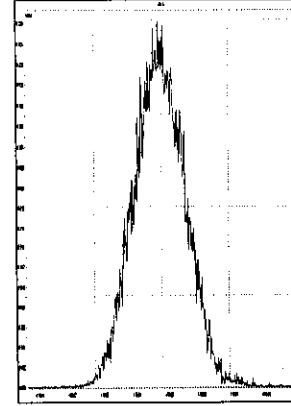
M 392.9760 R 11958



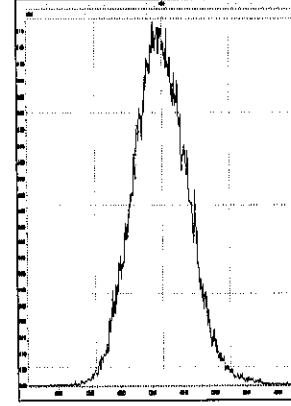
M 404.9760 R 11419



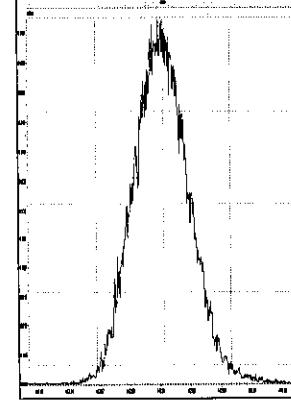
M 416.9760 R 11630



M 430.9728 R 10870

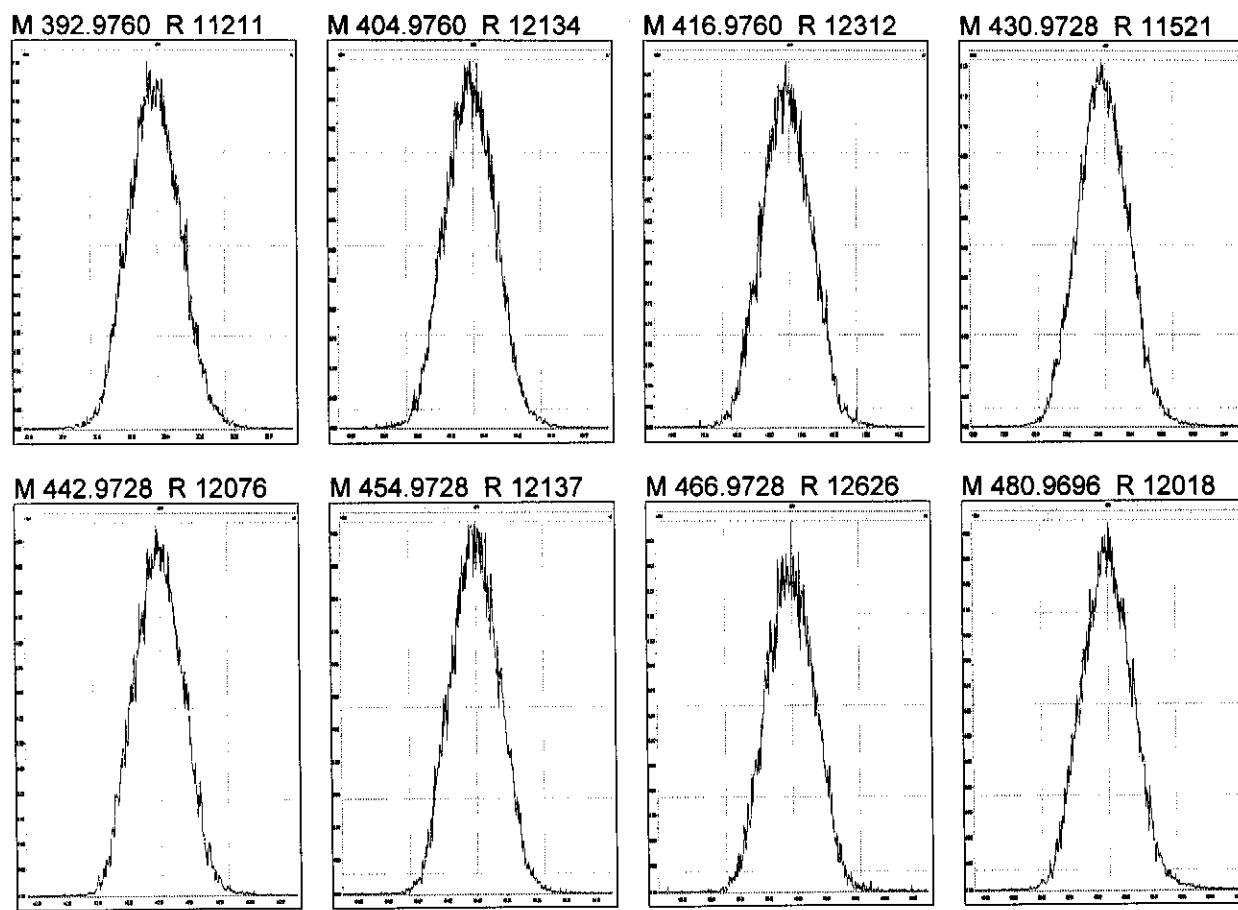


M 442.9728 R 10869



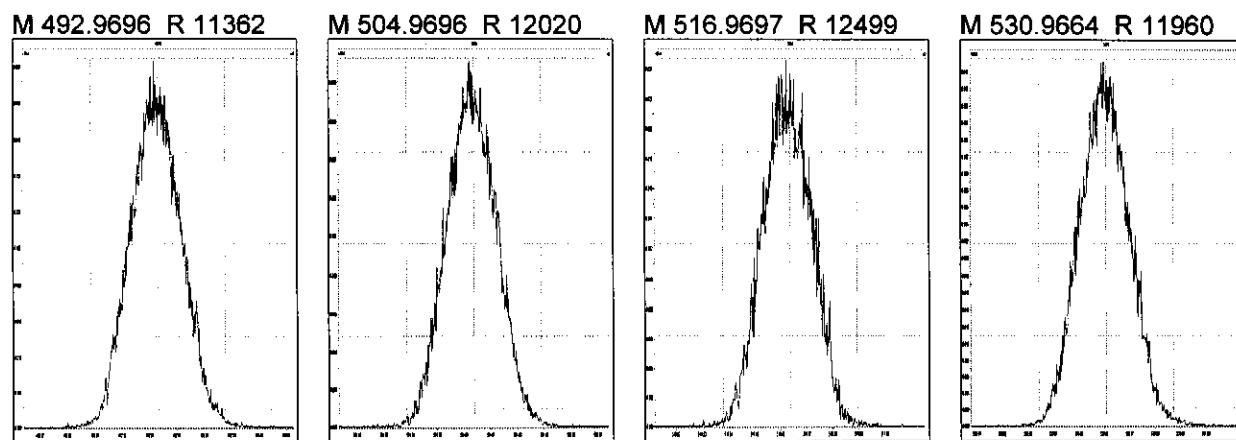
File: Experiment: 1668\_octyl\_1.exp Reference: Pfk\_193.ref Function: 6 @ 200 (ppm)

Printed: Thursday, September 17, 2015 15:02:59 Eastern Daylight Time



File: Experiment: 1668\_octyl\_1.exp Reference: Pfk\_193.ref Function: 7 @ 200 (ppm)

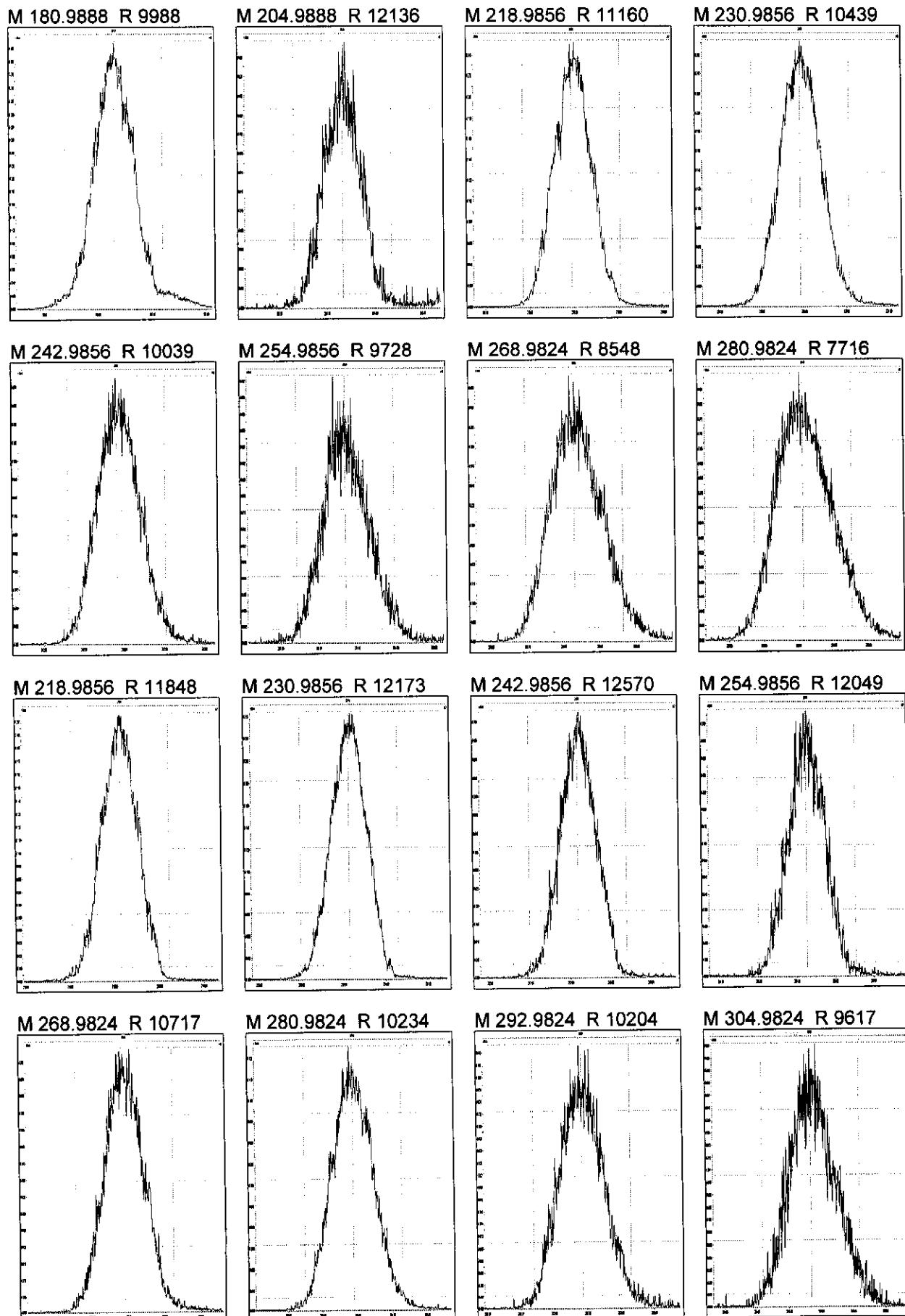
Printed: Thursday, September 17, 2015 15:03:15 Eastern Daylight Time



**Resolution Check Report****MassLynx 4.1 SCN815 SCN795**

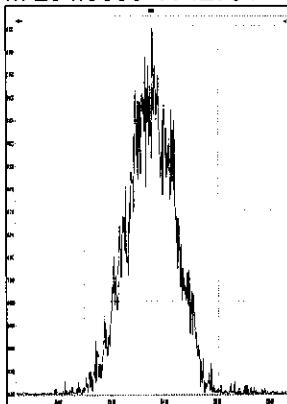
Page 1 of 4

Printed: Thursday, September 17, 2015 20:55:06 Eastern Daylight Time

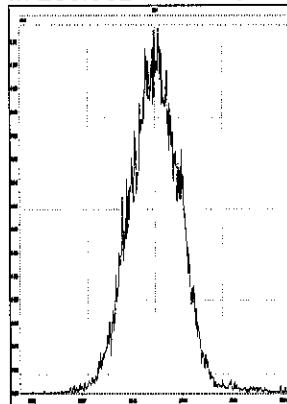


Printed: Thursday, September 17, 2015 20:55:06 Eastern Daylight Time

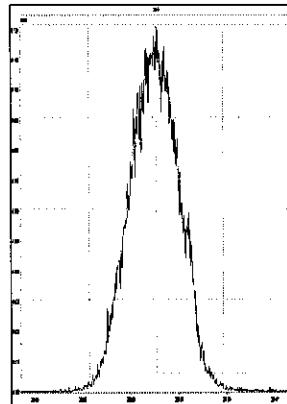
M 254.9856 R 12791



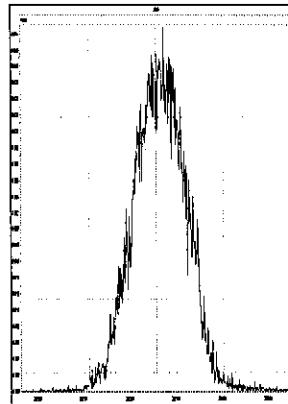
M 268.9824 R 12197



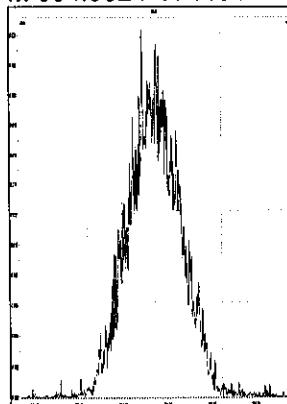
M 280.9824 R 12078



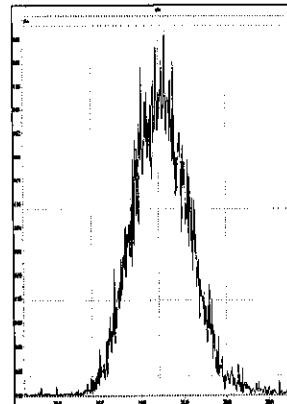
M 292.9824 R 12499



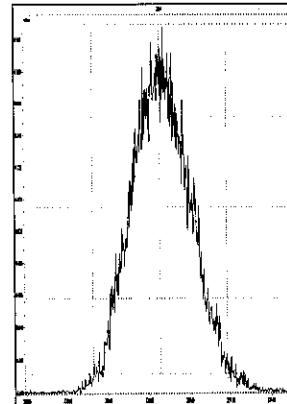
M 304.9824 R 11914



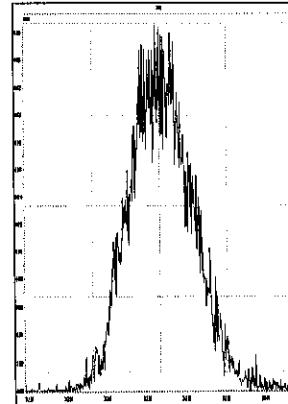
M 318.9792 R 11189



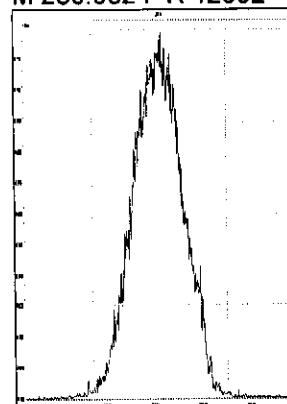
M 330.9792 R 10396



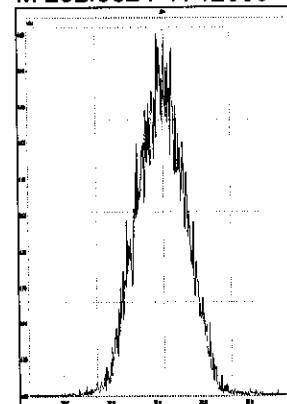
M 342.9792 R 10482



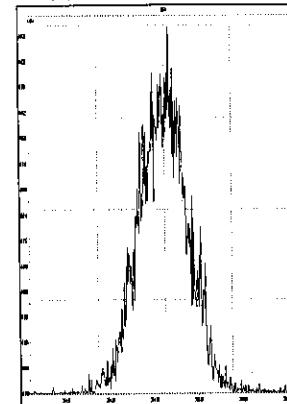
M 280.9824 R 12692



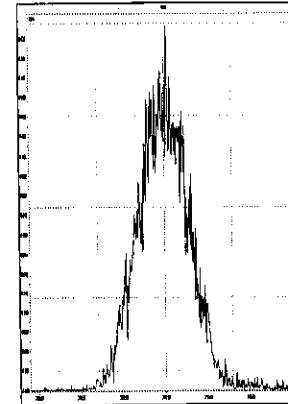
M 292.9824 R 12889



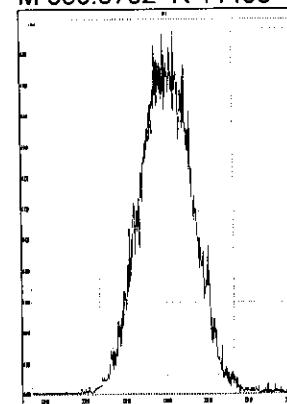
M 304.9824 R 13454



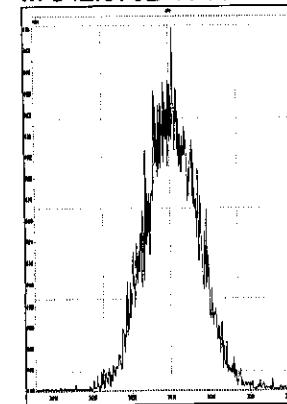
M 318.9792 R 12334



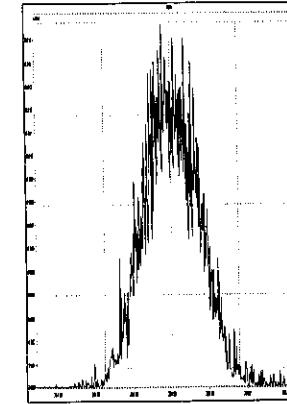
M 330.9792 R 11458



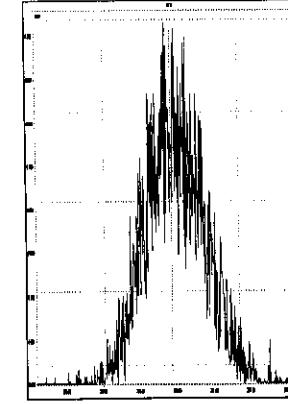
M 342.9792 R 11443



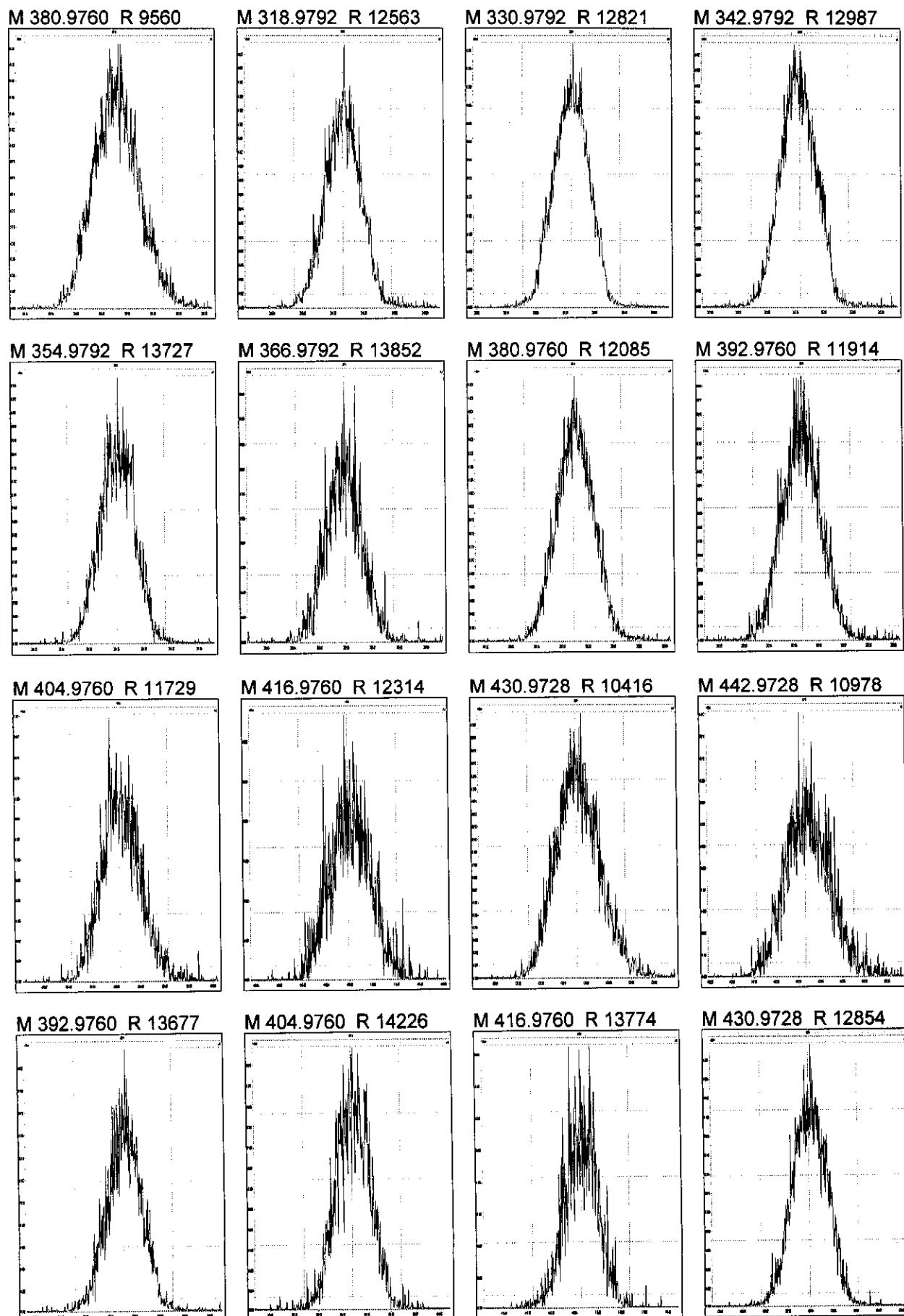
M 354.9792 R 11323



M 366.9792 R 11473

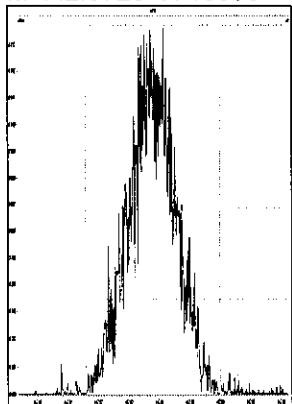


Printed: Thursday, September 17, 2015 20:55:06 Eastern Daylight Time

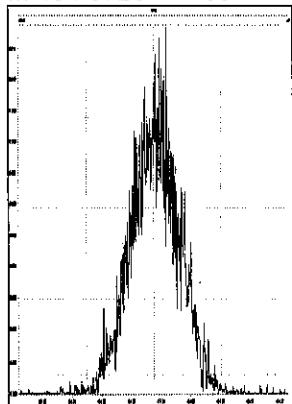


Printed: Thursday, September 17, 2015 20:55:06 Eastern Daylight Time

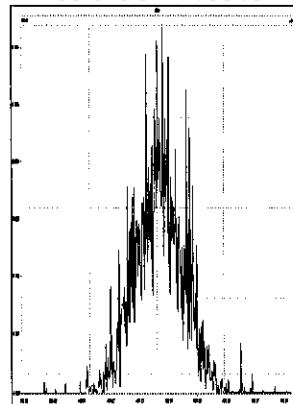
M 442.9728 R 13896



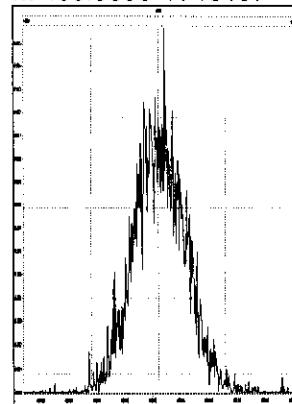
M 454.9728 R 13374



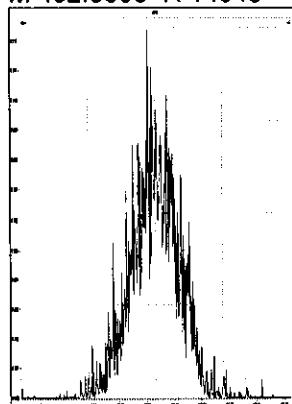
M 466.9728 R 16010



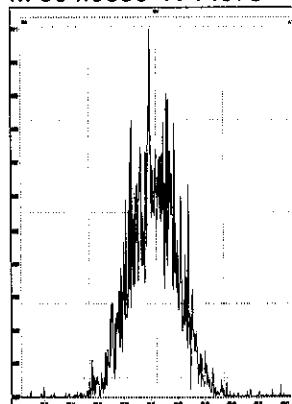
M 480.9696 R 13157



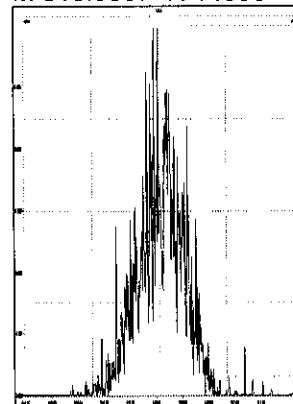
M 492.9696 R 14048



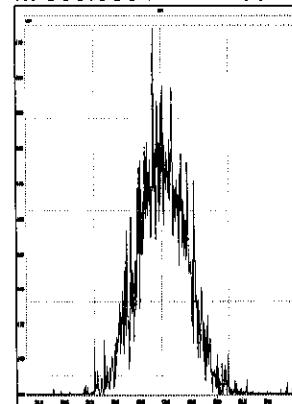
M 504.9696 R 14973



M 516.9697 R 14086



M 530.9664 R 14489



## Sample List Report

## MassLynx 4.1 SCN815 SCN795

Sample List: C:\MassLynx\Default.pro\Sampledb\5-151207C-RUN.SPL

Page 1 of 2

Last Modified: Tuesday, December 08, 2015 12:50:47 Eastern Standard Time

Printed: Tuesday, December 08, 2015 12:50:56 Eastern Standard Time

Page Position (1, 1)

	File Name	Sample ID	File Text	Sample Type	MS File	Inlet File	Bottle
1	5-151207C01	H5-15-WDM-329	1668A-CS#6-015C	Standard	1668_octyl_1	1668_octyl_1	Tray1:1
2	5-151207C02	H5-15-CCV-572	1668A-CS#3-015	QC	1668_octyl_1	1668_octyl_1	Tray1:3
3	5-151207C03	WG2182793-2	LCS	QC	1668_octyl_1	1668_octyl_1	Tray1:4
4	5-151207C04	TOLUENE	INST BLANK	Blank	1668_octyl_1	1668_octyl_1	Tray1:2
5	5-151207C05	WG2182793-1	MB	Analyte	1668_octyl_1	1668_octyl_1	Tray1:5
6	5-151207C06	L1678771-27	Sample	Analyte	1668_octyl_1	1668_octyl_1	Tray1:6
7	5-151207C07	L1678771-28	Sample	Analyte	1668_octyl_1	1668_octyl_1	Tray1:7
8	5-151207C08	L1678771-29	Sample	Analyte	1668_octyl_1	1668_octyl_1	Tray1:8
9	5-151207C09	L1678771-30	Sample	Analyte	1668_octyl_1	1668_octyl_1	Tray1:9
10	5-151207C10	L1678771-31	Sample	Analyte	1668_octyl_1	1668_octyl_1	Tray1:10
11	5-151207C11	L1678771-32	Sample	Analyte	1668_octyl_1	1668_octyl_1	Tray1:11
12	5-151207C12	L1678771-33	Sample	Analyte	1668_octyl_1	1668_octyl_1	Tray1:12
13	5-151207C13	L1679681-1	Sample	Analyte	1668_octyl_1	1668_octyl_1	Tray1:13
14	5-151207C14	L1679681-2	Sample	Analyte	1668_octyl_1	1668_octyl_1	Tray1:14
15	5-151207C15	TOLUENE	INST BLANK	Blank	1668_octyl_1	1668_octyl_1	Tray1:2
16	5-151207C16	H5-15-CCV-573	1668A-CS#3-015	QC	1668_octyl_1	1668_octyl_1	Tray1:3
17	5-151207C17	H5-15-WDM-330	1668A-CS#6-015C	Standard	1668_octyl_1	1668_octyl_1	Tray1:1
18	5-151207C18	H5-15-CCV-572 <sup>4</sup>	1668A-CS#3-015	QC	1668_octyl_1	1668_octyl_1	Tray1:3
19	5-151207C19	WG2225462-2	LCS	QC	1668_octyl_1	1668_octyl_1	Tray1:15
20	5-151207C20	WG2218309-2	LCS	QC	1668_octyl_1	1668_octyl_1	Tray1:16
21	5-151207C21	WG2224600-2	LCS	QC	1668_octyl_1	1668_octyl_1	Tray1:17
22	5-151207C22	TOLUENE	INST BLANK	Blank	1668_octyl_1	1668_octyl_1	Tray1:2
23	5-151207C23	WG2225462-1	MB	Analyte	1668_octyl_1	1668_octyl_1	Tray1:18
24	5-151207C24	WG2218309-1	MB	Analyte	1668_octyl_1	1668_octyl_1	Tray1:19
25	5-151207C25	WG2224600-1	MB	Analyte	1668_octyl_1	1668_octyl_1	Tray1:20
26	5-151207C26	L1685414-1	RE	Analyte	1668_octyl_1	1668_octyl_1	Tray1:21
27	5-151207C27	L1685416-1	RE	Analyte	1668_octyl_1	1668_octyl_1	Tray1:22
28	5-151207C28	L1683661-5	RE	Analyte	1668_octyl_1	1668_octyl_1	Tray1:23
29	5-151207C29	WG2218309-4	DUP	Analyte	1668_octyl_1	1668_octyl_1	Tray1:24
30	5-151207C30	L1699345-1	RE	Analyte	1668_octyl_1	1668_octyl_1	Tray1:25
31	5-151207C31	L1703064-1	RE	Analyte	1668_octyl_1	1668_octyl_1	Tray1:26
32	5-151207C32	H5-15-CCV-573 <sup>5</sup>	1668A-CS#3-015	QC	1668_octyl_1	1668_octyl_1	Tray1:3
33	--	--	--	--	--	--	--
34	Column	SPBOCTYL	56284-02B	--	--	--	--
35	Detector	325	--	--	--	--	--
36	Operator	ES	--	--	--	--	--

Nuss Res✓

VP v Ed Dec 8

Winn✓

Chro 15% → maintenance

IS S28 interference  
S29 interference

Ln S28, S29 many dips Fn 1-4 → dil

S32 dips -

X WO notes - DP, 1668C  
- target listBatch - CS 2  
- IS 2

AES Sciences - Burlington, ON

wo notes - WG2225462 - upload

- DP

- 1668A

- WG2218309 - moisture  
- 1668C- WG2224600 - 1668A  
L1699345 - upload, 209  
L1703064 - DCOP

Batch - notes

Rec

QC CCV-574 155% for PCB-54L

CCV-573 146% for PCB-54L

146%, PCB-202k

C1 S9 PCB-209 8%  
NB ✓C2 S28 → dil  
S29 → dil

S30 PCB-1L, 3L 4 low

S31 PVB-1L → 4L low

PVB-1L, 3L 2nd low  
<2.5 N

**Sample List Report****MassLynx MassLynx V4.1 SCN 901**

Sample List: C:\MassLynx\PCB.PRO\SampleDB\5-151207C2.SPL  
Last Modified: Tuesday, December 08, 2015 16:38:35 Eastern Standard Time  
Printed: Tuesday, December 15, 2015 11:53:02 Eastern Standard Time

Page 1 of 2

Page Position (1, 1)

	<b>File Name</b>	<b>Sample ID</b>	<b>File Text</b>	<b>Sample Type</b>	<b>Na Conc A</b>	<b>Na Conc B</b>	<b>Na Conc C</b>	<b>Na Conc D</b>	<b>Na Conc E</b>	<b>Na Conc F</b>	<b>Na Conc G</b>	<b>Na Conc H</b>	<b>FS Conc</b>	<b>CS Conc</b>	<b>ES Conc 1</b>	<b>ES Conc 2</b>
1	5-151207C17	H5-15-WDM-330	1668A-CS#6-015C	Standard	50	100	150	200	300	400	500	600	100	100	100	200
2	5-151207C23	WG2225462-1	MB	Analyte	---	---	---	---	---	---	---	---	2000	2000	2000	4000
3	5-151207C24	WG2218309-1	MB	Analyte	---	---	---	---	---	---	---	---	2000	2000	2000	4000
4	5-151207C25	WG2224600-1	MB	Analyte	---	---	---	---	---	---	---	---	2000	2000	2000	4000
5	5-151207C26	L1685414-1	RE	Analyte	---	---	---	---	---	---	---	---	2000	2000	2000	4000
6	5-151207C27	L1685416-1	RE	Analyte	---	---	---	---	---	---	---	---	2000	2000	2000	4000
7	5-151207C28	L1683661-5	RE	Analyte	---	---	---	---	---	---	---	---	2000	2000	2000	4000
8	5-151207C29	WG2218309-4	DUP	Analyte	---	---	---	---	---	---	---	---	2000	2000	2000	4000
9	5-151207C30	L1699345-1	RE	Analyte	---	---	---	---	---	---	---	---	2000	2000	2000	4000
10	5-151207C31	L1703064-1	RE	Analyte	---	---	---	---	---	---	---	---	2000	2000	2000	4000

**Sample List Report****MassLynx MassLynx V4.1 SCN 901**

Sample List: C:\MassLynx\PCB.PRO\SampleDB\5-151207C2.SPL  
Last Modified: Tuesday, December 08, 2015 16:38:35 Eastern Standard Time  
Printed: Tuesday, December 15, 2015 11:53:02 Eastern Standard Time

Page 2 of 2

Page Position (2, 1)

**IS Conc   Sample Size   Quan Meth   Quan Ref**

100	1.000	---	---
2000	1.000	---	---
2000	1.000	---	---
2000	1.000	---	---
2000	1.000	---	---
2000	1.000	---	---
2000	1.000	---	---
2000	1.000	---	---
2000	1.000	---	---
2000	1.000	---	---
2000	1.000	---	---
2000	1.000	---	---

**Sample List Report****MassLynx MassLynx V4.1 SCN 901**

Sample List: C:\MassLynx\PCB.PRO\SampleDB\5-151207C-QC-PKG.SPL  
Last Modified: Tuesday, December 15, 2015 11:56:04 Eastern Standard Time  
Printed: Tuesday, December 15, 2015 11:56:11 Eastern Standard Time

Page 1 of 2

Page Position (1, 1)

	<b>File Name</b>	<b>Sample ID</b>	<b>File Text</b>	<b>Sample Type</b>	<b>Na Conc A</b>	<b>Na Conc B</b>	<b>Na Conc C</b>	<b>Na Conc D</b>	<b>Na Conc E</b>	<b>Na Conc F</b>	<b>Na Conc G</b>	<b>Na Conc H</b>	<b>FS Conc</b>	<b>CS Conc</b>	<b>ES Conc 1</b>	<b>ES Conc 2</b>
1	5-151207C18	H5-15-CCV-574	1668A-CS#3-015	QC	50	50	50	100	---	---	---	---	100	100	100	200
2	5-151207C19	WG2225462-2	LCS	QC	1000	1000	1000	2000	---	---	---	---	2000	2000	2000	4000
3	5-151207C32	H5-15-CCV-575	1668A-CS#3-015	QC	50	50	50	100	---	---	---	---	100	100	100	200

**Sample List Report****MassLynx MassLynx V4.1 SCN 901**

Sample List: C:\MassLynx\PCB.PRO\SampleDB\5-151207C-QC-PKG.SPL  
Last Modified: Tuesday, December 15, 2015 11:56:04 Eastern Standard Time  
Printed: Tuesday, December 15, 2015 11:56:11 Eastern Standard Time

Page 2 of 2

Page Position (2, 1)

**IS Conc   Sample Size   Quan Meth   Quan Ref**

100	1.000	---	---
2000	1.000	---	---
100	1.000	---	---

## Quantify Sample Summary Report

## MassLynx MassLynx V4.1 SCN 901

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

**Method: C:\MassLynx\PCB.PRO\MethDB\1668-OCTYL-1-209CAL-151130C.mdb 03 Dec 2015 18:01:35****Calibration: 08 Dec 2015 18:27:57****Name: 5-151207C17, Date: 08-Dec-2015, Time: 01:44:40, ID: H5-15-WDM-330, Description: 1668A-CS#6-015C, Vial: Tray1:1**

	# Target Analyte	#Hom	Resp	Ion 1 Area	Ion 2 Area	Ra	Ra Fail=Y...	RT	RRT	RT L...	RT U...	Conc.	%Rec	Mod.	Comment	Noise 1	Noise 2
1	1 * PCB-1		49	342632		3.09	NO	8.89	1.00	8.85	8.92	56.978	114.0			1076	734
2	2 PCB-2		45	291239		3.13	NO	10.29	0.99	10.26	10.33	50.000	100.0			1076	734
3	3 PCB-3		53	327624		3.09	NO	10.41	1.00	10.38	10.45	56.975	114.0			1076	734
4	4 * PCB-4		49	337009		1.51	NO	10.59	1.00	10.55	10.62	49.509	99.0			1323	4818
5	5 PCB-10		66	537607		1.53	NO	10.70	1.01	10.66	10.73	50.000	100.0			1323	4818
6	6 PCB-9		53	434290		1.52	NO	11.86	1.12	11.82	11.89	50.000	100.0			1323	4818
7	7 PCB-7		61	497642		1.51	NO	11.97	1.13	11.93	12.00	50.000	100.0			1323	4818
8	8 PCB-6		63	510879		1.52	NO	12.11	1.15	12.08	12.15	50.000	100.0			1323	4818
9	9 PCB-5		51	415652		1.51	NO	12.32	1.17	12.29	12.36	50.000	100.0			1323	4818
10	10 PCB-8		71	576244		1.53	NO	12.39	1.17	12.35	12.42	50.000	100.0			1323	4818
11	11 * PCB-14		55	450734		1.51	NO	13.36	0.94	13.33	13.40	50.000	100.0			2348	4428
12	12 PCB-11		52	424497		1.51	NO	13.88	0.97	13.84	13.91	50.000	100.0			2348	4428
13	13 PCB-13/12		112	921424		1.50	NO	14.08	0.99	14.04	14.11	100.000	100.0			2348	4428
14	14 PCB-15		54	512275		1.51	NO	14.26	1.00	14.23	14.29	56.625	113.3			2348	4428
15	15 * PCB-19		56	362679		1.08	NO	12.59	1.00	12.56	12.63	55.410	110.8			541	510
16	16 * PCB-30/18		113	931502		1.08	NO	13.68	1.09	13.64	13.71	100.000	100.0			833	1164
17	17 PCB-17		47	383166		1.09	NO	13.95	1.11	13.91	13.98	50.000	100.0			833	1164
18	18 PCB-27		67	549534		1.10	NO	14.08	1.12	14.04	14.11	50.000	100.0			833	1164
19	19 PCB-24		67	552986		1.08	NO	14.16	1.13	14.13	14.20	50.000	100.0			833	1164
20	20 PCB-16		47	384047		1.08	NO	14.23	1.13	14.20	14.27	50.000	100.0			833	1164
21	21 PCB-32		76	630348		1.08	NO	14.52	1.15	14.49	14.55	50.000	100.0			833	1164
22	22 * PCB-34		59	508136		1.00	NO	15.22	0.84	15.18	15.25	50.000	100.0			1396	1365
23	23 PCB-23		72	610123		1.01	NO	15.31	0.84	15.28	15.34	50.000	100.0			1396	1365
24	24 PCB-29/26		115	976569		1.01	NO	15.50	0.85	15.47	15.53	100.000	100.0			1396	1365
25	25 PCB-25		78	666705		1.00	NO	15.62	0.86	15.59	15.65	50.000	100.0			1396	1365
26	26 PCB-31		67	571695		1.01	NO	15.80	0.87	15.76	15.83	50.000	100.0			1396	1365
27	27 PCB-28/20		126	1076524		1.01	NO	15.99	0.88	15.95	16.02	100.000	100.0			1396	1365
28	28 PCB-21/33		149	1275942		1.00	NO	16.11	0.89	16.07	16.14	100.000	100.0			1396	1365
29	29 PCB-22		64	546719		1.02	NO	16.34	0.90	16.31	16.38	50.000	100.0			1396	1365
30	30 PCB-36		72	612949		1.01	NO	17.18	0.94	17.14	17.21	50.000	100.0			1396	1365
31	31 PCB-39		64	544864		1.00	NO	17.38	0.96	17.35	17.41	50.000	100.0			1396	1365
32	32 PCB-38		69	588624		1.01	NO	17.72	0.97	17.69	17.75	50.000	100.0			1396	1365
33	33 PCB-35		63	540415		1.01	NO	17.97	0.99	17.94	18.00	50.000	100.0			1396	1365
34	34 PCB-37		52	542784		1.00	NO	18.20	1.00	18.16	18.23	55.439	110.9			1396	1365

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C17, Date: 08-Dec-2015, Time: 01:44:40, ID: H5-15-WDM-330, Description: 1668A-CS#6-015C, Vial: Tray1:1

	# Target Analyte	#Hom	Resp	Ion 1 Area	Ion 2 Area	Ra	Ra Fail=Y...	RT	RRT	RT L...	RT U...	Conc.	%Rec	Mod.	Comment	Noise 1	Noise 2
35	35 * PCB-54		111	1275633		0.79	NO	14.45	1.00	14.42	14.48	112.010	112.0			715	684
36	36 * PCB-50/53		172	1939665		0.78	NO	15.66	1.08	15.62	15.69	200.000	100.0			1101	828
37	37 PCB-45/51		162	1822180		0.78	NO	16.07	1.11	16.04	16.10	200.000	100.0			1101	828
38	38 PCB-46		71	798204		0.78	NO	16.23	1.12	16.20	16.26	100.000	100.0			1101	828
39	39 PCB-52		76	859840		0.78	NO	16.97	1.18	16.94	17.00	100.000	100.0			1101	828
40	40 PCB-73		110	1242161		0.78	NO	17.04	1.18	17.01	17.08	100.000	100.0			1101	828
41	41 PCB-43		73	825687		0.78	NO	17.11	1.19	17.08	17.14	100.000	100.0			1101	828
42	42 PCB-69/49		204	2292021		0.78	NO	17.21	1.19	17.18	17.25	200.000	100.0			1101	828
43	43 PCB-48		82	925229		0.78	NO	17.40	1.21	17.37	17.43	100.000	100.0			1101	828
44	44 PCB-44/47/65		291	3279484		0.78	NO	17.55	1.22	17.52	17.58	300.000	100.0			1101	828
45	45 PCB-59/62/75		349	3930614		0.78	NO	17.71	1.23	17.68	17.74	300.000	100.0			1101	828
46	46 PCB-42		87	978224		0.78	NO	17.83	1.24	17.80	17.86	100.000	100.0			1101	828
47	47 PCB-41/71/40		239	2688747		0.78	NO	18.10	1.25	18.07	18.14	300.000	100.0			1101	828
48	48 PCB-64		127	1426510		0.78	NO	18.22	1.26	18.18	18.25	100.000	100.0			1101	828
49	49 * PCB-72		94	1078862		0.75	NO	18.62	0.86	18.58	18.65	100.000	100.0			1	756
50	50 PCB-68		121	1380815		0.76	NO	18.78	0.86	18.75	18.82	100.000	100.0			1	756
51	51 PCB-57		97	1102296		0.76	NO	19.01	0.87	18.98	19.05	100.000	100.0			1	756
52	52 PCB-58		92	1049943		0.76	NO	19.15	0.88	19.12	19.19	100.000	100.0			1	756
53	53 PCB-67		128	1458155		0.76	NO	19.24	0.88	19.21	19.28	100.000	100.0			1	756
54	54 PCB-63		106	1211791		0.76	NO	19.38	0.89	19.35	19.42	100.000	100.0			1	756
55	55 PCB-61/70/74/76		422	4795694		0.77	NO	19.57	0.90	19.54	19.60	400.000	100.0			1	756
56	56 PCB-66		103	1171789		0.76	NO	19.75	0.91	19.71	19.78	100.000	100.0			1	756
57	57 PCB-55		107	1216820		0.76	NO	19.85	0.91	19.82	19.89	100.000	100.0			1	756
58	58 PCB-56		102	1163242		0.76	NO	20.12	0.92	20.08	20.15	100.000	100.0			1	756
59	59 PCB-60		106	1205948		0.76	NO	20.24	0.93	20.21	20.27	100.000	100.0			1	756
60	60 PCB-80		118	1331237		0.77	NO	20.38	0.94	20.35	20.41	100.000	100.0			1	756
61	61 PCB-79		117	1339263		0.76	NO	21.22	0.98	21.19	21.25	100.000	100.0			1	756
62	62 PCB-78		106	1211562		0.76	NO	21.53	0.99	21.50	21.56	100.000	100.0			1	756
63	63 PCB-81		110	1197108		0.77	NO	21.78	1.00	21.74	21.81	107.377	107.4			1	756
64	64 PCB-77		106	1230686		0.76	NO	22.08	1.00	22.04	22.11	104.947	104.9			1	756
65	65 * PCB-104		116	843460		1.56	NO	17.51	1.00	17.48	17.55	101.987	102.0			497	505
66	66 PCB-96		110	756740		1.56	NO	17.74	1.01	17.70	17.77	100.000	100.0			497	505
67	67 * PCB-103		80	536196		1.62	NO	18.72	1.07	18.69	18.76	100.000	100.0			1710	1430
68	68 PCB-94		75	510041		1.59	NO	18.86	1.08	18.83	18.90	100.000	100.0			1710	1430
69	69 PCB-95		68	462618		1.59	NO	19.11	1.09	19.08	19.14	100.000	100.0	ES151208MB		1710	1430
70	70 PCB-100/93/102/98		323	2180788		1.61	NO	19.30	1.10	19.26	19.33	400.000	100.0	ES151208MJ		1710	1430
71	71 PCB-88/91		150	1012400		1.61	NO	19.57	1.12	19.54	19.60	200.000	100.0	ES151208MJ		1710	1430

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C17, Date: 08-Dec-2015, Time: 01:44:40, ID: H5-15-WDM-330, Description: 1668A-CS#6-015C, Vial: Tray1:1

	# Target Analyte	#Hom	Resp	Ion 1 Area	Ion 2 Area	Ra	Ra Fail=Y...	RT	RRT	RT L...	RT U...	Conc.	%Rec	Mod.	Comment	Noise 1	Noise 2
72	72 PCB-84		67	475645		1.48	NO	19.72	1.13	19.69	19.75	100.000	100.0			1710	1430
73	73 PCB-89		73	491678		1.61	NO	19.97	1.14	19.93	20.00	100.000	100.0			1710	1430
74	74 PCB-121		116	781447		1.62	NO	20.11	1.15	20.07	20.14	100.000	100.0			1710	1430
75	75 PCB-92		75	504211		1.61	NO	20.33	1.16	20.30	20.36	100.000	100.0			1710	1430
76	76 PCB-113/90/101		266	1806274		1.59	NO	20.63	1.18	20.60	20.66	300.000	100.0			1710	1430
77	77 PCB-83/99		155	1042811		1.61	NO	20.94	0.91	20.90	20.97	200.000	100.0			1710	1430
78	78 PCB-112		117	795132		1.60	NO	21.03	0.91	20.99	21.06	100.000	100.0			1710	1430
79	79 PCB-108/119/86/97/125/...		583	3941684		1.61	NO	21.21	0.92	21.18	21.24	600.000	100.0			1710	1430
80	80 PCB-117/116/85/110/115		539	3651219		1.60	NO	21.64	0.94	21.60	21.67	500.000	100.0	ES151208MJ		1710	1430
81	81 PCB-82		54	363069		1.60	NO	21.90	0.95	21.87	21.93	100.000	100.0	ES151208MA		1710	1430
82	82 PCB-111		115	812214		1.50	NO	22.02	0.95	21.99	22.06	100.000	100.0			1710	1430
83	83 PCB-120		122	835399		1.56	NO	22.26	0.97	22.23	22.30	100.000	100.0			1710	1430
84	84 * PCB-107/124		209	1434204		1.57	NO	22.89	0.99	22.86	22.92	200.000	100.0			10381	1414
85	85 PCB-109		104	715177		1.56	NO	23.02	1.00	22.98	23.05	100.000	100.0			10381	1414
86	86 PCB-123		110	745856		1.56	NO	23.08	1.00	23.04	23.11	118.932	118.9			10381	1414
87	87 PCB-106		116	796851		1.57	NO	23.16	1.00	23.12	23.19	100.000	100.0			10381	1414
88	88 PCB-118		121	821748		1.57	NO	23.25	1.00	23.22	23.28	124.045	124.0			10381	1414
89	89 PCB-122		96	655531		1.59	NO	23.45	1.00	23.41	23.48	100.000	100.0			10381	1414
90	90 PCB-114		121	800287		1.56	NO	23.54	1.00	23.51	23.57	120.124	120.1			10381	1414
91	91 PCB-105		111	744881		1.58	NO	23.89	1.00	23.85	23.92	113.157	113.2			10381	1414
92	92 PCB-127		112	758678		1.60	NO	24.60	1.03	24.57	24.64	100.000	100.0			10381	1414
93	93 PCB-126		111	804344		1.59	NO	25.47	1.00	25.44	25.51	111.295	111.3			10381	1414
94	94 * PCB-155		110	994652		1.26	NO	20.50	1.00	20.47	20.54	108.332	108.3			425	159
95	95 PCB-152		96	804556		1.26	NO	20.66	1.01	20.63	20.70	100.000	100.0			425	159
96	96 PCB-150		127	1051832		1.27	NO	20.73	1.01	20.69	20.76	100.000	100.0			425	159
97	97 PCB-136		104	863634		1.26	NO	20.96	1.02	20.92	20.99	100.000	100.0			425	159
98	98 PCB-145		105	872071		1.26	NO	21.10	1.03	21.06	21.13	100.000	100.0			425	159
99	99 PCB-148		79	660580		1.26	NO	21.83	1.07	21.80	21.86	100.000	100.0			425	159
100	1... PCB-151/135		159	1331239		1.26	NO	22.18	1.08	22.15	22.22	200.000	100.0			425	159
101	1... PCB-154		100	835600		1.26	NO	22.26	1.09	22.23	22.30	100.000	100.0			425	159
102	1... PCB-144		81	675940		1.27	NO	22.46	1.10	22.42	22.49	100.000	100.0			425	159
103	1... * PCB-147/149		163	1376591		1.23	NO	22.65	1.11	22.61	22.68	200.000	100.0			6268	2563
104	1... PCB-134/143		144	1211272		1.24	NO	22.81	1.11	22.78	22.84	200.000	100.0			6268	2563
105	1... PCB-139/140		166	1393794		1.25	NO	22.96	1.12	22.93	22.99	200.000	100.0			6268	2563
106	1... PCB-131		75	636495		1.21	NO	23.09	0.88	23.05	23.12	100.000	100.0			6268	2563
107	1... PCB-142		77	643993		1.24	NO	23.18	0.88	23.15	23.21	100.000	100.0			6268	2563
108	1... PCB-132		75	633959		1.23	NO	23.34	0.89	23.31	23.38	100.000	100.0			6268	2563

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C17, Date: 08-Dec-2015, Time: 01:44:40, ID: H5-15-WDM-330, Description: 1668A-CS#6-015C, Vial: Tray1:1

	# Target Analyte	#Hom	Resp	Ion 1 Area	Ion 2 Area	Ra	Ra Fail=Y...	RT	RRT	RT L...	RT U...	Conc.	%Rec	Mod.	Comment	Noise 1	Noise 2
109	1... PCB-133		76	638373		1.23	NO	23.53	0.89	23.49	23.56	100.000	100.0			6268	2563
110	1... PCB-165		100	847076		1.22	NO	23.74	0.90	23.70	23.77	100.000	100.0			6268	2563
111	1... PCB-146		92	778324		1.22	NO	23.86	0.91	23.83	23.90	100.000	100.0			6268	2563
112	1... PCB-161		108	910526		1.24	NO	23.93	0.91	23.90	23.97	100.000	100.0			6268	2563
113	1... PCB-153/168		205	1732073		1.24	NO	24.20	0.92	24.17	24.23	200.000	100.0			6268	2563
114	1... PCB-141		81	678883		1.24	NO	24.30	0.92	24.27	24.34	100.000	100.0			6268	2563
115	1... PCB-130		69	581371		1.23	NO	24.52	0.93	24.49	24.56	100.000	100.0			6268	2563
116	1... PCB-137/164		152	1656450		0.73	YES	24.70	0.94	24.66	24.73	200.000	100.0	ES151208MJ		6268	2563
117	1... PCB-138/163/129		262	2213051		1.23	NO	24.86	0.94	24.83	24.89	300.000	100.0			6268	2563
118	1... PCB-160		116	976260		1.24	NO	24.96	0.95	24.93	25.00	100.000	100.0			6268	2563
119	1... PCB-158		128	1076503		1.24	NO	25.06	0.95	25.02	25.09	100.000	100.0			6268	2563
120	1... PCB-128/166		203	1719351		1.23	NO	25.53	0.97	25.50	25.56	200.000	100.0			6268	2563
121	1... PCB-159		119	1004802		1.23	NO	25.98	0.99	25.95	26.02	100.000	100.0			6268	2563
122	1... PCB-162		127	1066760		1.25	NO	26.13	0.99	26.10	26.17	100.000	100.0			6268	2563
123	1... PCB-167		126	976084		1.23	NO	26.38	1.00	26.34	26.41	107.328	107.3			6268	2563
124	1... PCB-156/157		245	2017020		1.24	NO	27.00	1.00	26.97	27.03	216.930	108.5			6268	2563
125	1... PCB-169		116	988433		1.26	NO	28.65	1.00	28.61	28.68	108.650	108.6			6268	2563
126	1... * PCB-188		96	1001516		1.03	NO	23.49	1.00	23.46	23.53	90.290	90.3			1834	1556
127	1... PCB-179		99	898075		1.03	NO	23.70	1.01	23.67	23.73	100.000	100.0			1834	1556
128	1... PCB-184		116	1053643		1.02	NO	23.94	1.02	23.91	23.98	100.000	100.0			1834	1556
129	1... PCB-176		105	949770		1.03	NO	24.16	1.03	24.13	24.20	100.000	100.0			1834	1556
130	1... PCB-186		106	960483		1.03	NO	24.42	1.04	24.39	24.45	100.000	100.0			1834	1556
131	1... PCB-178		78	710401		1.03	NO	25.07	1.07	25.03	25.10	100.000	100.0			1834	1556
132	1... PCB-175		87	796015		1.02	NO	25.39	1.08	25.36	25.43	100.000	100.0			1834	1556
133	1... PCB-187		100	913108		1.02	NO	25.53	1.09	25.50	25.56	100.000	100.0			1834	1556
134	1... PCB-182		90	816872		1.02	NO	25.62	1.09	25.59	25.66	100.000	100.0			1834	1556
135	1... PCB-183		83	754010		1.03	NO	25.84	1.10	25.81	25.88	100.000	100.0			1834	1556
136	1... PCB-185		86	780191		1.03	NO	25.92	1.10	25.89	25.96	100.000	100.0			1834	1556
137	1... PCB-174		80	727522		1.03	NO	25.99	1.11	25.96	26.03	100.000	100.0			1834	1556
138	1... PCB-177		77	699472		1.04	NO	26.23	1.12	26.19	26.26	100.000	100.0			1834	1556
139	1... PCB-181		85	773117		1.04	NO	26.42	0.88	26.39	26.46	100.000	100.0			1834	1556
140	1... PCB-171/173		156	1413547		1.04	NO	26.55	0.89	26.52	26.58	200.000	100.0			1834	1556
141	1... PCB-172		82	745787		1.02	NO	27.34	0.91	27.30	27.37	100.000	100.0			1834	1556
142	1... PCB-192		104	940779		1.03	NO	27.49	0.92	27.45	27.52	100.000	100.0			1834	1556
143	1... PCB-180/193		205	1863335		1.03	NO	27.65	0.92	27.62	27.68	200.000	100.0			1834	1556
144	1... PCB-191		112	1021963		1.03	NO	27.86	0.93	27.82	27.89	100.000	100.0			1834	1556
145	1... PCB-170		81	747654		1.01	NO	28.34	0.95	28.31	28.38	100.000	100.0			1834	1556

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C17, Date: 08-Dec-2015, Time: 01:44:40, ID: H5-15-WDM-330, Description: 1668A-CS#6-015C, Vial: Tray1:1

	# Target Analyte	#Hom	Resp	Ion 1 Area	Ion 2 Area	Ra	Ra Fail=Y...	RT	RRT	RT L...	RT U...	Conc.	%Rec	Mod.	Comment	Noise 1	Noise 2
146	1... PCB-190		122	1120820		1.01	NO	28.62	0.96	28.59	28.66	100.000	100.0			1834	1556
147	1... * PCB-189		104	810623		1.03	NO	29.92	1.00	29.89	29.96	120.446	120.4			2688	3142
148	1... * PCB-202		166	1597864		0.90	NO	26.26	1.00	26.23	26.29	165.085	110.1			686	613
149	1... PCB-201		173	1523268	800	0.90	NO	26.73	1.02	26.70	26.77	150.000	100.0			686	613
150	1... PCB-204		192	1691304		0.90	NO	27.07	1.03	27.04	27.10	150.000	100.0			686	613
151	1... PCB-197		181	1591593		0.90	NO	27.20	1.04	27.16	27.23	150.000	100.0			686	613
152	1... PCB-200		184	1620008		0.90	NO	27.28	1.04	27.25	27.31	150.000	100.0			686	613
153	1... PCB-198/199		263	2323050		0.89	NO	28.67	0.92	28.64	28.70	300.000	100.0			686	613
154	1... PCB-196		127	1123533		0.90	NO	29.00	0.93	28.97	29.04	150.000	100.0			686	613
155	1... PCB-203		141	1243773		0.90	NO	29.11	0.93	29.08	29.14	150.000	100.0			686	613
156	1... * PCB-195		108	943332		0.91	NO	29.83	0.95	29.79	29.86	150.000	100.0			2546	2924
157	1... PCB-194		107	939535		0.90	NO	31.03	0.99	31.00	31.06	150.000	100.0			2546	2924
158	1... PCB-205		141	1127841		0.90	NO	31.30	1.00	31.26	31.33	171.854	114.6			2546	2924
159	1... * PCB-208		161	1263445	50786	0.79	NO	29.67	1.00	29.63	29.70	173.339	115.6			1066	1498
160	1... PCB-207		182	1209832		0.79	NO	30.14	1.02	30.11	30.18	150.000	100.0			1066	1498
161	1... PCB-206		155	850178		0.79	NO	32.38	1.00	32.35	32.41	179.927	120.0			1066	1498
162	1... * PCB-209		150	845828		1.18	NO	33.51	1.00	33.47	33.54	184.804	123.2			147	147
163	1... 13C-PCB-31		118	991728		1.05	NO	15.79	0.87	15.76	15.82	95.183	95.2			20431	8450
164	1... 13C-PCB-95		62	418718		1.59	NO	19.09	1.09	19.06	19.13	89.859	89.9			1349	764
165	1... 13C-PCB-153		79	655047		1.28	NO	24.16	1.18	24.13	24.20	90.997	91.0			1443	1431
166	1... 13C-PCB-28		165	1085955		1.03	NO	15.96	0.94	15.92	15.99	92.948	92.9			20431	8450
167	1... 13C-PCB-111		135	661440		1.59	NO	22.01	1.07	21.97	22.04	102.329	102.3			1349	764
168	1... 13C-PCB-178		93	667832		1.06	NO	25.04	1.01	25.01	25.08	109.988	110.0			1096	1060
169	1... 13C-PCB-1		118	686203		3.15	NO	8.88	0.75	8.84	8.91	95.641	95.6			1404	5299
170	1... 13C-PCB-3		105	615075		3.12	NO	10.40	0.88	10.37	10.44	93.869	93.9			1404	5299
171	1... 13C-PCB-4		72	672200		1.59	NO	10.58	0.89	10.54	10.61	110.559	110.6			8061	1664
172	1... 13C-PCB-15		99	919355		1.59	NO	14.25	1.20	14.22	14.28	98.503	98.5			11784	2344
173	1... 13C-PCB-19		56	642921		1.09	NO	12.58	1.06	12.55	12.62	124.028	124.0			23924	17381
174	1... 13C-PCB-37		156	1019705		1.05	NO	18.19	1.07	18.15	18.22	86.015	86.0			20431	8450
175	1... 13C-PCB-54		153	1146068		0.79	NO	14.43	0.85	14.40	14.47	123.759	123.8			4254	2231
176	1... 13C-PCB-81		151	1065997		0.80	NO	21.76	1.06	21.73	21.79	92.825	92.8			3561	2170
177	1... 13C-PCB-77		161	1135846		0.80	NO	22.06	1.07	22.03	22.09	89.897	89.9			3561	2170
178	1... 13C-PCB-104		147	723397		1.58	NO	17.49	1.03	17.46	17.53	119.158	119.2			695	752
179	1... 13C-PCB-123		136	663384		1.61	NO	23.06	1.12	23.03	23.10	97.836	97.8			2886	1721
180	1... 13C-PCB-118		138	668915		1.62	NO	23.24	1.13	23.20	23.27	93.785	93.8			2886	1721
181	1... 13C-PCB-114		133	654152		1.59	NO	23.53	0.95	23.49	23.56	96.328	96.3			2886	1721
182	1... 13C-PCB-105		136	664819		1.60	NO	23.87	0.96	23.84	23.91	96.272	96.3			2886	1721

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C17, Date: 08-Dec-2015, Time: 01:44:40, ID: H5-15-WDM-330, Description: 1668A-CS#6-015C, Vial: Tray1:1

	# Target Analyte	#Hom	Resp	Ion 1 Area	Ion 2 Area	Ra	Ra Fail=Y...	RT	RRT	RT L...	RT U...	Conc.	%Rec	Mod.	Comment	Noise 1	Noise 2
183	1... 13C-PCB-126		147	720850		1.59	NO	25.46	1.02	25.43	25.49	102.598	102.6			2886	1721
184	1... 13C-PCB-155		160	896813		1.27	NO	20.50	0.99	20.46	20.53	117.605	117.6			640	276
185	1... 13C-PCB-167		117	755093		1.29	NO	26.36	1.06	26.33	26.40	96.278	96.3			1443	1431
186	1... 13C-PCB-156/157		249	1608366		1.30	NO	26.99	1.09	26.96	27.02	201.266	100.6			1443	1431
187	1... 13C-PCB-169		130	839218		1.29	NO	28.63	1.15	28.60	28.67	102.815	102.8			1443	1431
188	1... 13C-PCB-188		142	1021049		1.06	NO	23.48	0.94	23.45	23.51	109.064	109.1			1096	1060
189	1... 13C-PCB-189		107	774553		1.04	NO	29.91	0.96	29.88	29.94	80.839	80.8			2693	2637
190	1... 13C-PCB-202		123	962083		0.90	NO	26.25	1.06	26.22	26.28	131.384	131.4			961	689
191	1... 13C-PCB-205		133	807155		0.88	NO	31.29	1.01	31.25	31.32	94.817	94.8			1572	2383
192	1... 13C-PCB-208		123	795121	50786	0.77	NO	29.66	0.96	29.62	29.69	110.984	111.0			903	1540
193	1... 13C-PCB-206		86	551422		0.78	NO	32.36	1.04	32.32	32.39	107.789	107.8			903	1540
194	1... 13C-PCB-209		107	564289		1.18	NO	33.48	1.08	33.45	33.51	103.076	103.1			172	149
195	1... 13C-PCB-9	2411869	928670			1.60	NO	11.84	0.48	11.81	11.88	100.000	100.0			8061	1664
196	1... 13C-PCB-52		1337626	741572		0.80	NO	16.96	0.68	16.93	16.99	100.000	100.0			2766	1679
197	1... 13C-PCB-101		1269557	490898		1.59	NO	20.62	0.83	20.59	20.65	100.000	100.0			1349	764
198	1... 13C-PCB-138		1484415	643344		1.31	NO	24.85	0.00	24.81	24.88	100.000	100.0			1443	1431
199	1... 13C-PCB-194		1146087	607177		0.89	NO	31.02	1.25	30.98	31.05	100.000	100.0			1572	2383

## Quantify Sample Summary Report

## MassLynx MassLynx V4.1 SCN 901

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C23, Date: 08-Dec-2015, Time: 05:40:13, ID: WG2225462-1, Description: MB, Vial: Tray1:18

	# Target Analyte	#Hom	Resp	Ion 1 Area	Ion 2 Area	Ra	Ra Fail=Y...	RT	RRT	RT L...	RT U...	Conc.	%Rec	Mod.	Comment	Noise 1	Noise 2
1	1 * PCB-1		1	86		3.42	NO	8.86	1.00	8.83	8.90	1.516				428	418
2	2 PCB-2		1	92		2.59	YES	10.39	1.00	10.36	10.42	1.340				428	418
3	3 PCB-3															428	418
4	4 * PCB-4															789	2816
5	5 PCB-10															789	2816
6	6 PCB-9															789	2816
7	7 PCB-7		13	984		2.08	YES	11.94	1.13	11.91	11.98	10.610				789	2816
8	8 PCB-6															789	2816
9	9 PCB-5		7	832		1.06	YES	12.37	1.17	12.34	12.41	7.200				789	2816
10	10 PCB-8															789	2816
11	11 * PCB-14															1412	2272
12	12 PCB-11		20	1687		1.75	NO	13.87	0.97	13.83	13.90	18.993				1412	2272
13	13 PCB-13/12															1412	2272
14	14 PCB-15															1412	2272
15	15 * PCB-19															407	515
16	16 * PCB-30/18		2	193		1.22	YES	13.68	1.09	13.65	13.72	1.404				505	507
17	17 PCB-17		1	113		1.16	NO	13.94	1.11	13.90	13.97	0.967				505	507
18	18 PCB-27															505	507
19	19 PCB-24															505	507
20	20 PCB-16															505	507
21	21 PCB-32		1	74		0.91	NO	14.51	1.16	14.48	14.55	0.342				505	507
22	22 * PCB-34															659	763
23	23 PCB-23															659	763
24	24 PCB-29/26															659	763
25	25 PCB-25															659	763
26	26 PCB-31		2	321		0.86	YES	15.79	0.87	15.76	15.82	1.658				659	763
27	27 PCB-28/20		3	435		0.56	YES	15.96	0.88	15.92	15.99	2.002				659	763
28	28 PCB-21/33		1	203		0.94	NO	16.09	0.89	16.06	16.12	0.984				659	763
29	29 PCB-22															659	763
30	30 PCB-36															659	763
31	31 PCB-39															659	763
32	32 PCB-38															659	763
33	33 PCB-35															659	763
34	34 PCB-37		1	194		0.28	YES	18.17	1.00	18.13	18.20	0.667				659	763
35	35 * PCB-54															271	442
36	36 * PCB-50/53															459	762
37	37 PCB-45/51															459	762

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

**Name: 5-151207C23, Date: 08-Dec-2015, Time: 05:40:13, ID: WG2225462-1, Description: MB, Vial: Tray1:18**

	# Target Analyte	#Hom	Resp	Ion 1 Area	Ion 2 Area	Ra	Ra Fail=Y...	RT	RRT	RT L...	RT U...	Conc.	%Rec	Mod.	Comment	Noise 1	Noise 2
38	38 PCB-46															459	762
39	39 PCB-52		1	271		0.73		NO	16.96	1.18	16.93	16.99	1.712			459	762
40	40 PCB-73															459	762
41	41 PCB-43															459	762
42	42 PCB-69/49															459	762
43	43 PCB-48															459	762
44	44 PCB-44/47/65		2	400	15470	0.67		NO	17.52	1.22	17.49	17.56	1.905			459	762
45	45 PCB-59/62/75															459	762
46	46 PCB-42															459	762
47	47 PCB-41/71/40															459	762
48	48 PCB-64															459	762
49	49 * PCB-72															530	846
50	50 PCB-68															530	846
51	51 PCB-57															530	846
52	52 PCB-58															530	846
53	53 PCB-67															530	846
54	54 PCB-63															530	846
55	55 PCB-61/70/74/76		1	192		0.47		YES	19.58	0.90	19.54	19.61	0.743			530	846
56	56 PCB-66															530	846
57	57 PCB-55															530	846
58	58 PCB-56															530	846
59	59 PCB-60															530	846
60	60 PCB-80															530	846
61	61 PCB-79															530	846
62	62 PCB-78															530	846
63	63 PCB-81															530	846
64	64 PCB-77															530	846
65	65 * PCB-104															136	322
66	66 PCB-96															136	322
67	67 * PCB-103															212	385
68	68 PCB-94															212	385
69	69 PCB-95															212	385
70	70 PCB-100/93/102/98															212	385
71	71 PCB-88/91															212	385
72	72 PCB-84															212	385
73	73 PCB-89															212	385
74	74 PCB-121															212	385

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

**Name: 5-151207C23, Date: 08-Dec-2015, Time: 05:40:13, ID: WG2225462-1, Description: MB, Vial: Tray1:18**

	# Target Analyte	#Hom	Resp	Ion 1 Area	Ion 2 Area	Ra	Ra Fail=Y...	RT	RRT	RT L...	RT U...	Conc.	%Rec	Mod.	Comment	Noise 1	Noise 2
75	75 PCB-92															212	385
76	76 PCB-113/90/101		1	116		1.19	YES	20.61	1.18	20.58	20.64	0.773			212	385	
77	77 PCB-83/99		1	83		1.92	YES	20.94	0.91	20.90	20.97	0.847			212	385	
78	78 PCB-112														212	385	
79	79 PCB-108/119/86/97/125/...														212	385	
80	80 PCB-117/116/85/110/115		1	125		1.42	NO	21.69	0.94	21.65	21.72	0.761			212	385	
81	81 PCB-82														212	385	
82	82 PCB-111														212	385	
83	83 PCB-120														212	385	
84	84 * PCB-107/124														400	389	
85	85 PCB-109														400	389	
86	86 PCB-123														400	389	
87	87 PCB-106														400	389	
88	88 PCB-118		1	132		1.23	YES	23.23	1.00	23.19	23.26	0.748			400	389	
89	89 PCB-122														400	389	
90	90 PCB-114														400	389	
91	91 PCB-105		0	83		1.27	YES	23.87	1.00	23.84	23.91	0.488			400	389	
92	92 PCB-127														400	389	
93	93 PCB-126														400	389	
94	94 * PCB-155														207	171	
95	95 PCB-152														207	171	
96	96 PCB-150														207	171	
97	97 PCB-136														207	171	
98	98 PCB-145														207	171	
99	99 PCB-148														207	171	
100	1... PCB-151/135														207	171	
101	1... PCB-154														207	171	
102	1... PCB-144														207	171	
103	1... * PCB-147/149		0	68		1.27	NO	22.64	1.11	22.60	22.67	0.436			227	277	
104	1... PCB-134/143														227	277	
105	1... PCB-139/140														227	277	
106	1... PCB-131														227	277	
107	1... PCB-142														227	277	
108	1... PCB-132														227	277	
109	1... PCB-133														227	277	
110	1... PCB-165														227	277	
111	1... PCB-146														227	277	

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

**Name: 5-151207C23, Date: 08-Dec-2015, Time: 05:40:13, ID: WG2225462-1, Description: MB, Vial: Tray1:18**

	# Target Analyte	#Hom	Resp	Ion 1 Area	Ion 2 Area	Ra	Ra Fail=Y...	RT	RRT	RT L...	RT U...	Conc.	%Rec	Mod.	Comment	Noise 1	Noise 2
112	1... PCB-161															227	277
113	1... PCB-153/168		1	221		1.52	YES	24.16	0.92	24.13	24.20	1.247				227	277
114	1... PCB-141															227	277
115	1... PCB-130															227	277
116	1... PCB-137/164															227	277
117	1... PCB-138/163/129		1	127		2.28	YES	24.84	0.94	24.80	24.87	1.093				227	277
118	1... PCB-160															227	277
119	1... PCB-158															227	277
120	1... PCB-128/166															227	277
121	1... PCB-159															227	277
122	1... PCB-162															227	277
123	1... PCB-167															227	277
124	1... PCB-156/157															227	277
125	1... PCB-169															227	277
126	1... * PCB-188															265	200
127	1... PCB-179															265	200
128	1... PCB-184															265	200
129	1... PCB-176															265	200
130	1... PCB-186															265	200
131	1... PCB-178															265	200
132	1... PCB-175															265	200
133	1... PCB-187		0	151		0.40	YES	25.50	1.09	25.46	25.53	0.490				265	200
134	1... PCB-182															265	200
135	1... PCB-183															265	200
136	1... PCB-185															265	200
137	1... PCB-174															265	200
138	1... PCB-177															265	200
139	1... PCB-181															265	200
140	1... PCB-171/173															265	200
141	1... PCB-172															265	200
142	1... PCB-192															265	200
143	1... PCB-180/193		1	123		1.69	YES	27.65	0.93	27.62	27.68	0.748				265	200
144	1... PCB-191															265	200
145	1... PCB-170															265	200
146	1... PCB-190															265	200
147	1... * PCB-189															183	205
148	1... * PCB-202															149	242

## Quantify Sample Summary Report

## MassLynx MassLynx V4.1 SCN 901

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C23, Date: 08-Dec-2015, Time: 05:40:13, ID: WG2225462-1, Description: MB, Vial: Tray1:18

	# Target Analyte	#Hom	Resp	Ion 1 Area	Ion 2 Area	Ra	Ra Fail=Y...	RT	RRT	RT L...	RT U...	Conc.	%Rec	Mod.	Comment	Noise 1	Noise 2
149	1... PCB-201															149	242
150	1... PCB-204															149	242
151	1... PCB-197															149	242
152	1... PCB-200															149	242
153	1... PCB-198/199															149	242
154	1... PCB-196															149	242
155	1... PCB-203															149	242
156	1... * PCB-195															146	193
157	1... PCB-194	0	82		0.75		YES	31.01	0.99	30.97	31.04	0.513				146	193
158	1... PCB-205															146	193
159	1... * PCB-208															415	887
160	1... PCB-207															415	887
161	1... PCB-206															415	887
162	1... * PCB-209	1	103		1.39		YES	33.46	1.00	33.43	33.50	1.203				98	122
163	1... 13C-PCB-31															16253	5543
164	1... 13C-PCB-95	1	196		1.11		YES	19.15	1.10	19.11	19.18	1.635	0.1			423	752
165	1... 13C-PCB-153	14	2852		1.18		NO	24.15	1.18	24.12	24.19	16.314	0.8			1474	1395
166	1... 13C-PCB-28	2046	359439		1.07		NO	15.94	0.94	15.91	15.97	1153.770	57.7			16253	5543
167	1... 13C-PCB-111	2198	322806		1.59		NO	21.99	1.07	21.95	22.02	1668.777	83.4			423	752
168	1... 13C-PCB-178	1596	370078		1.05		NO	25.03	1.01	25.00	25.07	1895.422	94.8			1126	686
169	1... 13C-PCB-1	742	135479		3.28		NO	8.86	0.75	8.83	8.90	600.560	30.0			1201	5846
170	1... 13C-PCB-3	664	123002		3.22		NO	10.39	0.88	10.36	10.42	594.308	29.7			1201	5846
171	1... 13C-PCB-4	470	137920		1.67		NO	10.56	0.89	10.53	10.60	720.141	36.0			9817	2098
172	1... 13C-PCB-15	735	216909		1.65		NO	14.23	1.20	14.20	14.27	734.586	36.7			13373	2303
173	1... 13C-PCB-19	369	137836		1.09		NO	12.56	1.06	12.52	12.59	821.647	41.1			18010	7662
174	1... 13C-PCB-37	2176	385059		1.05		NO	18.17	1.07	18.13	18.20	1197.621	59.9			16253	5543
175	1... 13C-PCB-54	1185	241659		0.78		NO	14.42	0.85	14.38	14.45	956.572	47.8			2324	1696
176	1... 13C-PCB-81	2215	475064		0.77		NO	21.75	1.06	21.72	21.78	1357.219	67.9			2276	1248
177	1... 13C-PCB-77	2338	502931		0.77		NO	22.04	1.07	22.01	22.07	1306.003	65.3			2276	1248
178	1... 13C-PCB-104	1611	236982	15470	1.59		NO	17.48	1.03	17.44	17.51	1307.953	65.4			602	704
179	1... 13C-PCB-123	2009	292615		1.61		NO	23.04	1.12	23.01	23.07	1439.979	72.0			1991	1488
180	1... 13C-PCB-118	2136	310598		1.62		NO	23.21	1.13	23.18	23.25	1450.299	72.5			1991	1488
181	1... 13C-PCB-114	2002	286785		1.66		NO	23.52	0.95	23.48	23.55	1446.663	72.3			1991	1488
182	1... 13C-PCB-105	2066	301408		1.61		NO	23.86	0.96	23.83	23.90	1463.062	73.2			1991	1488
183	1... 13C-PCB-126	2293	334825		1.61		NO	25.44	1.02	25.40	25.47	1598.884	79.9			1991	1488
184	1... 13C-PCB-155	2123	356107		1.27		NO	20.47	0.99	20.44	20.50	1559.799	78.0			415	535
185	1... 13C-PCB-167	1769	363834		1.31		NO	26.34	1.06	26.31	26.37	1460.494	73.0			1474	1395

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

**Name: 5-151207C23, Date: 08-Dec-2015, Time: 05:40:13, ID: WG2225462-1, Description: MB, Vial: Tray1:18**

	# Target Analyte	#Hom	Resp	Ion 1 Area	Ion 2 Area	Ra	Ra Fail=Y...	RT	RRT	RT L...	RT U...	Conc.	%Rec	Mod.	Comment	Noise 1	Noise 2
186	1... 13C-PCB-156/157		3786	782517		1.30	NO	26.97	1.09	26.93	27.00	3058.341	76.5			1474	1395
187	1... 13C-PCB-169		1987	411046		1.30	NO	28.61	1.15	28.58	28.64	1575.518	78.8			1474	1395
188	1... 13C-PCB-188		1943	449687		1.05	NO	23.46	0.94	23.42	23.49	1493.339	74.7			1126	686
189	1... 13C-PCB-189		1680	390617		1.04	NO	29.89	0.96	29.85	29.92	1274.650	63.7			3308	1964
190	1... 13C-PCB-202		1756	436912		0.91	NO	26.23	1.06	26.19	26.26	1874.342	93.7			528	647
191	1... 13C-PCB-205		1939	385741		0.89	NO	31.26	1.01	31.23	31.29	1386.756	69.3			886	1982
192	1... 13C-PCB-208		1712	365051		0.77	NO	29.63	0.96	29.60	29.66	1550.592	77.5			1279	891
193	1... 13C-PCB-206		1173	249134		0.77	NO	32.33	1.04	32.30	32.36	1473.354	73.7			1279	891
194	1... 13C-PCB-209		1340	231630		1.18	NO	33.45	1.08	33.42	33.48	1289.853	64.5			343	262
195	1... 13C-PCB-9		1564301	605430		1.58	NO	11.82	0.48	11.79	11.85	64.858	3.2			9817	2098
196	1... 13C-PCB-52		725978	403173		0.80	NO	16.94	0.68	16.91	16.97	54.274	2.7			2224	1563
197	1... 13C-PCB-101		761277	296004		1.57	NO	20.60	0.83	20.57	20.64	59.964	3.0			423	752
198	1... 13C-PCB-138		950267	413950		1.30	NO	24.82	0.00	24.79	24.86	64.016	3.2			1474	1395
199	1... 13C-PCB-194		753750	398970		0.89	NO	30.99	1.25	30.96	31.03	65.767	3.3			886	1982

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C26, Date: 08-Dec-2015, Time: 07:38:47, ID: L1685414-1, Description: RE, Vial: Tray1:21

	# Target Analyte	#Hom	Resp	Ion 1 Area	Ion 2 Area	Ra	Ra Fail=Y...	RT	RRT	RT L...	RT U...	Conc.	%Rec	Mod.	Comment	Noise 1	Noise 2
1	1 * PCB-1		1	96		1.45	YES	8.85	1.00	8.82	8.88	0.773				382	357
2	2 PCB-2															382	357
3	3 PCB-3															382	357
4	4 * PCB-4															919	2297
5	5 PCB-10															919	2297
6	6 PCB-9															919	2297
7	7 PCB-7															919	2297
8	8 PCB-6															919	2297
9	9 PCB-5															919	2297
10	10 PCB-8															919	2297
11	11 * PCB-14															928	2203
12	12 PCB-11		16	1824		1.09		YES	13.84	0.97	13.81	13.87	15.001			928	2203
13	13 PCB-13/12															928	2203
14	14 PCB-15															928	2203
15	15 * PCB-19															379	380
16	16 * PCB-30/18		2	213		1.03		NO	13.67	1.09	13.63	13.70	1.445			543	410
17	17 PCB-17		1	93	11653	1.49		YES	13.92	1.11	13.89	13.95	0.938	ES151211MA		543	410
18	18 PCB-27															543	410
19	19 PCB-24															543	410
20	20 PCB-16															543	410
21	21 PCB-32															543	410
22	22 * PCB-34															558	448
23	23 PCB-23															558	448
24	24 PCB-29/26															558	448
25	25 PCB-25															558	448
26	26 PCB-31		2	260		0.81		YES	15.77	0.87	15.74	15.80	1.333			558	448
27	27 PCB-28/20		2	257		1.28		YES	15.95	0.88	15.91	15.98	1.759			558	448
28	28 PCB-21/33		1	137		1.10		NO	16.08	0.89	16.05	16.11	0.736			558	448
29	29 PCB-22		1	111	104684	1.27		YES	16.33	0.90	16.30	16.37	0.743			558	448
30	30 PCB-36															558	448
31	31 PCB-39															558	448
32	32 PCB-38															558	448
33	33 PCB-35															558	448
34	34 PCB-37															558	448
35	35 * PCB-54															187	344
36	36 * PCB-50/53															345	603
37	37 PCB-45/51		0	108		0.64		YES	16.03	1.11	16.00	16.07	0.606	ES151211MB		345	603

## Quantify Sample Summary Report

## MassLynx MassLynx V4.1 SCN 901

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C26, Date: 08-Dec-2015, Time: 07:38:47, ID: L1685414-1, Description: RE, Vial: Tray1:21

	# Target Analyte	#Hom	Resp	Ion 1 Area	Ion 2 Area	Ra	Ra Fail=Y...	RT	RRT	RT L...	RT U...	Conc.	%Rec	Mod.	Comment	Noise 1	Noise 2
38	38 PCB-46															345	603
39	39 PCB-52		1	283		0.86		NO	16.94	1.18	16.91	16.97	1.917			345	603
40	40 PCB-73															345	603
41	41 PCB-43															345	603
42	42 PCB-69/49		1	139		0.74		NO	17.21	1.20	17.18	17.25	0.658			345	603
43	43 PCB-48															345	603
44	44 PCB-44/47/65		3	630	131950	0.61		YES	17.51	1.22	17.48	17.55	2.900	ES151211MB		345	603
45	45 PCB-59/62/75															345	603
46	46 PCB-42															345	603
47	47 PCB-41/71/40															345	603
48	48 PCB-64		1	133	48231	0.84		NO	18.20	1.26	18.16	18.23	0.536	ES151211MB		345	603
49	49 * PCB-72															478	847
50	50 PCB-68															478	847
51	51 PCB-57															478	847
52	52 PCB-58															478	847
53	53 PCB-67															478	847
54	54 PCB-63															478	847
55	55 PCB-61/70/74/76		1	217		1.24		YES	19.53	0.90	19.50	19.57	1.275	ES151211MB		478	847
56	56 PCB-66		1	163		0.87		NO	19.72	0.91	19.69	19.75	0.820	ES151211MA		478	847
57	57 PCB-55															478	847
58	58 PCB-56															478	847
59	59 PCB-60															478	847
60	60 PCB-80															478	847
61	61 PCB-79															478	847
62	62 PCB-78															478	847
63	63 PCB-81															478	847
64	64 PCB-77															478	847
65	65 * PCB-104															151	332
66	66 PCB-96															151	332
67	67 * PCB-103															308	361
68	68 PCB-94															308	361
69	69 PCB-95		1	108		1.78		NO	19.08	1.09	19.05	19.12	1.147	ES151211MB		308	361
70	70 PCB-100/93/102/98															308	361
71	71 PCB-88/91															308	361
72	72 PCB-84															308	361
73	73 PCB-89															308	361
74	74 PCB-121															308	361

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C26, Date: 08-Dec-2015, Time: 07:38:47, ID: L1685414-1, Description: RE, Vial: Tray1:21

	# Target Analyte	#Hom	Resp	Ion 1 Area	Ion 2 Area	Ra	Ra Fail=Y...	RT	RRT	RT L...	RT U...	Conc.	%Rec	Mod.	Comment	Noise 1	Noise 2	
75	75 PCB-92															308	361	
76	76 PCB-113/90/101		1	183		1.49		NO	20.61	1.18	20.58	20.64	1.336			308	361	
77	77 PCB-83/99			1	63			2.44		YES	20.91	0.91	20.88	20.94	0.728	ES151211MB	308	361
78	78 PCB-112															308	361	
79	79 PCB-108/119/86/97/125/...		1	81		2.28		YES	21.24	0.92	21.20	21.27	0.709	ES151211MB		308	361	
80	80 PCB-117/116/85/110/115															308	361	
81	81 PCB-82															308	361	
82	82 PCB-111															308	361	
83	83 PCB-120															308	361	
84	84 * PCB-107/124															213	323	
85	85 PCB-109															213	323	
86	86 PCB-123															213	323	
87	87 PCB-106															213	323	
88	88 PCB-118		1	194		1.38		NO	23.21	1.00	23.18	23.25	1.118			213	323	
89	89 PCB-122															213	323	
90	90 PCB-114															213	323	
91	91 PCB-105															213	323	
92	92 PCB-127															213	323	
93	93 PCB-126															213	323	
94	94 * PCB-155															275	222	
95	95 PCB-152															275	222	
96	96 PCB-150															275	222	
97	97 PCB-136															275	222	
98	98 PCB-145															275	222	
99	99 PCB-148															275	222	
100	1... PCB-151/135		1	130		1.67		YES	22.13	1.08	22.10	22.16	0.964	ES151211MJ		275	222	
101	1... PCB-154															275	222	
102	1... PCB-144															275	222	
103	1... * PCB-147/149		1	264		0.91		YES	22.61	1.11	22.58	22.65	1.374	ES151211MB		244	347	
104	1... PCB-134/143															244	347	
105	1... PCB-139/140															244	347	
106	1... PCB-131															244	347	
107	1... PCB-142															244	347	
108	1... PCB-132															244	347	
109	1... PCB-133															244	347	
110	1... PCB-165															244	347	
111	1... PCB-146		0	92		1.05		YES	23.84	0.91	23.81	23.87	0.458	ES151211MB		244	347	

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C26, Date: 08-Dec-2015, Time: 07:38:47, ID: L1685414-1, Description: RE, Vial: Tray1:21

	# Target Analyte	#Hom	Resp	Ion 1 Area	Ion 2 Area	Ra	Ra Fail=Y...	RT	RRT	RT L...	RT U...	Conc.	%Rec	Mod.	Comment	Noise 1	Noise 2
112	1... PCB-161															244	347
113	1... PCB-153/168		3	556		1.32		NO	24.15	0.92	24.12	24.19	2.791			244	347
114	1... PCB-141															244	347
115	1... PCB-130															244	347
116	1... PCB-137/164		0	74		0.72		YES	24.64	0.94	24.61	24.67	0.371			244	347
117	1... PCB-138/163/129		3	581		1.15		NO	24.82	0.94	24.79	24.86	3.183			244	347
118	1... PCB-160															244	347
119	1... PCB-158															244	347
120	1... PCB-128/166															244	347
121	1... PCB-159															244	347
122	1... PCB-162															244	347
123	1... PCB-167															244	347
124	1... PCB-156/157		0	79		0.87		YES	26.95	1.00	26.92	26.99	0.277			244	347
125	1... PCB-169															244	347
126	1... * PCB-188															295	326
127	1... PCB-179															295	326
128	1... PCB-184															295	326
129	1... PCB-176															295	326
130	1... PCB-186															295	326
131	1... PCB-178															295	326
132	1... PCB-175															295	326
133	1... PCB-187		1	204		1.21		YES	25.48	1.09	25.45	25.52	0.947			295	326
134	1... PCB-182															295	326
135	1... PCB-183		0	78		1.19		NO	25.81	1.10	25.78	25.84	0.433			295	326
136	1... PCB-185															295	326
137	1... PCB-174															295	326
138	1... PCB-177		0	81		0.91		NO	26.19	1.12	26.16	26.22	0.417			295	326
139	1... PCB-181															295	326
140	1... PCB-171/173															295	326
141	1... PCB-172															295	326
142	1... PCB-192															295	326
143	1... PCB-180/193		2	428		1.09		NO	27.64	0.93	27.60	27.67	1.829			295	326
144	1... PCB-191															295	326
145	1... PCB-170		1	140		1.35		YES	28.31	0.95	28.28	28.34	0.848			295	326
146	1... PCB-190															295	326
147	1... * PCB-189															418	280
148	1... * PCB-202															194	219

## Quantify Sample Summary Report

## MassLynx MassLynx V4.1 SCN 901

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C26, Date: 08-Dec-2015, Time: 07:38:47, ID: L1685414-1, Description: RE, Vial: Tray1:21

	# Target Analyte	#Hom	Resp	Ion 1 Area	Ion 2 Area	Ra	Ra Fail=Y...	RT	RRT	RT L...	RT U...	Conc.	%Rec	Mod.	Comment	Noise 1	Noise 2
149	1... PCB-201															194	219
150	1... PCB-204															194	219
151	1... PCB-197															194	219
152	1... PCB-200															194	219
153	1... PCB-198/199															194	219
154	1... PCB-196															194	219
155	1... PCB-203															194	219
156	1... * PCB-195															180	179
157	1... PCB-194	0	87		1.40		YES	30.98	0.99	30.95	31.01	0.679		ES151211MB	180	179	
158	1... PCB-205															180	179
159	1... * PCB-208															363	903
160	1... PCB-207															363	903
161	1... PCB-206															363	903
162	1... * PCB-209	1	146		0.84		YES	33.46	1.00	33.43	33.50	1.100				94	148
163	1... 13C-PCB-31	9	1067		1.14		NO	15.76	0.87	15.73	15.79	6.962	0.3			17136	6038
164	1... 13C-PCB-95	1	138		1.53		NO	19.15	1.10	19.11	19.18	1.327	0.1			966	656
165	1... 13C-PCB-153	14	2700		1.37		NO	24.13	1.18	24.10	24.16	16.268	0.8			1767	1527
166	1... 13C-PCB-28	1991	331062		1.05		NO	15.93	0.94	15.90	15.96	1123.140	56.2			17136	6038
167	1... 13C-PCB-111	2208	320056		1.59		NO	21.97	1.07	21.94	22.00	1676.620	83.8			966	656
168	1... 13C-PCB-178	1618	379538		1.07		NO	25.01	1.01	24.98	25.04	1921.333	96.1			1091	821
169	1... 13C-PCB-1	921	170556		3.12		NO	8.84	0.75	8.81	8.87	745.433	37.3			918	6533
170	1... 13C-PCB-3	812	150561		3.12		NO	10.38	0.88	10.34	10.41	726.578	36.3			918	6533
171	1... 13C-PCB-4	560	162052		1.64		NO	10.54	0.89	10.50	10.57	857.363	42.9			7992	1469
172	1... 13C-PCB-15	722	208117		1.65		NO	14.22	1.20	14.18	14.25	721.607	36.1			9463	2317
173	1... 13C-PCB-19	451	163494		1.11		NO	12.55	1.06	12.51	12.58	1005.074	50.3			13808	7934
174	1... 13C-PCB-37	2085	346231	48231	1.06		NO	18.16	1.07	18.13	18.19	1147.561	57.4			17136	6038
175	1... 13C-PCB-54	1265	243217		0.78		NO	14.40	0.85	14.37	14.43	1020.917	51.0			1664	1419
176	1... 13C-PCB-81	2223	468578	1144	0.78		NO	21.73	1.06	21.70	21.77	1362.294	68.1			1799	1596
177	1... 13C-PCB-77	2397	506244		0.78		NO	22.03	1.07	22.00	22.07	1339.258	67.0			1799	1596
178	1... 13C-PCB-104	1554	224417	131950	1.60		NO	17.47	1.03	17.43	17.50	1261.382	63.1			710	595
179	1... 13C-PCB-123	2146	305467	892	1.64		NO	23.03	1.12	23.00	23.06	1538.014	76.9			2298	1670
180	1... 13C-PCB-118	2264	325240		1.62		NO	23.20	1.13	23.17	23.24	1537.319	76.9			2298	1670
181	1... 13C-PCB-114	2232	317893		1.64		NO	23.50	0.95	23.47	23.54	1612.740	80.6			2298	1670
182	1... 13C-PCB-105	2244	321900		1.62		NO	23.84	0.96	23.81	23.87	1589.549	79.5			2298	1670
183	1... 13C-PCB-126	2465	355815		1.60		NO	25.43	1.02	25.39	25.46	1718.919	85.9			2298	1670
184	1... 13C-PCB-155	2105	348971		1.27		NO	20.46	0.99	20.43	20.49	1546.758	77.3			412	474
185	1... 13C-PCB-167	1827	385660		1.30		NO	26.33	1.06	26.30	26.36	1508.547	75.4			1767	1527

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

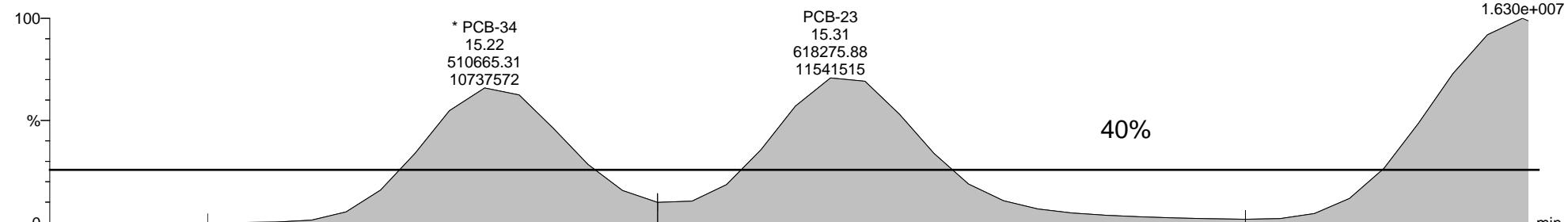
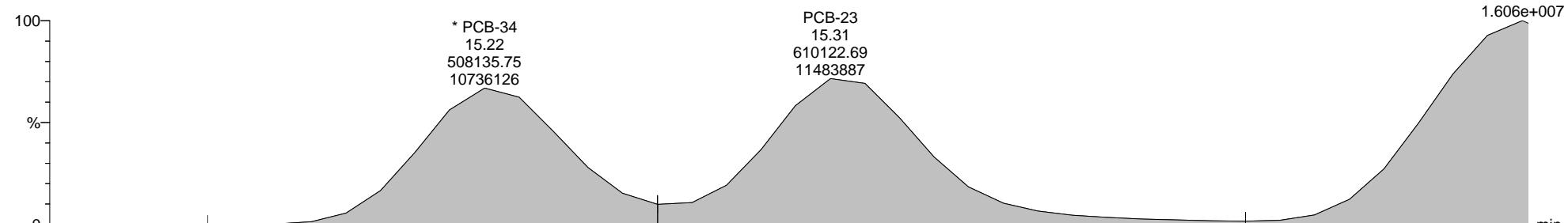
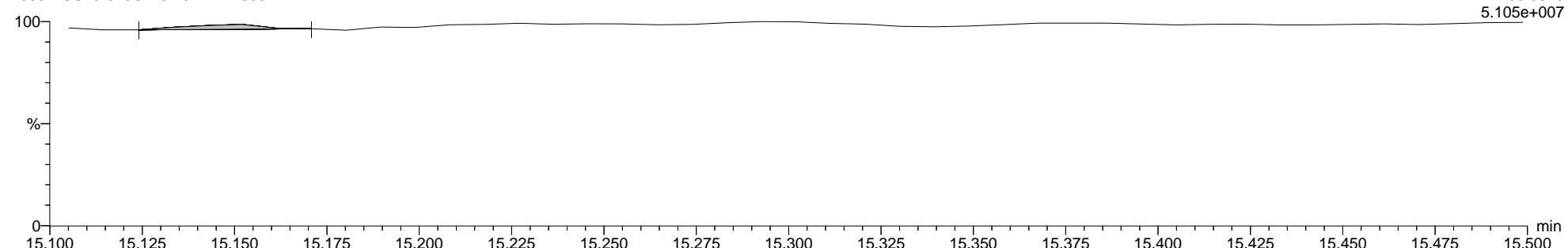
**Name: 5-151207C26, Date: 08-Dec-2015, Time: 07:38:47, ID: L1685414-1, Description: RE, Vial: Tray1:21**

	# Target Analyte	#Hom	Resp	Ion 1 Area	Ion 2 Area	Ra	Ra Fail=Y...	RT	RRT	RT L...	RT U...	Conc.	%Rec	Mod.Comment	Noise 1	Noise 2
186	1... 13C-PCB-156/157		3880	817516		1.31	NO	26.95	1.09	26.92	26.99	3133.822	78.3		1767	1527
187	1... 13C-PCB-169		2017	428490	3446	1.29	NO	28.60	1.15	28.57	28.63	1599.787	80.0		1767	1527
188	1... 13C-PCB-188		2178	516457		1.05	NO	23.45	0.94	23.41	23.48	1674.301	83.7		1091	821
189	1... 13C-PCB-189		1739	413443		1.04	NO	29.87	0.96	29.84	29.91	1319.693	66.0		2750	2069
190	1... 13C-PCB-202		1904	484898		0.91	NO	26.21	1.06	26.18	26.25	2032.380	101.6		1035	793
191	1... 13C-PCB-205		2087	419480		0.90	NO	31.25	1.01	31.22	31.28	1492.903	74.6		1969	1534
192	1... 13C-PCB-208		1944	418861		0.77	NO	29.62	0.96	29.59	29.65	1760.776	88.0		1220	1294
193	1... 13C-PCB-206		1336	287101		0.78	NO	32.32	1.04	32.29	32.35	1678.809	83.9		1220	1294
194	1... 13C-PCB-209		1569	273598		1.19	NO	33.44	1.08	33.40	33.47	1510.380	75.5		169	176
195	1... 13C-PCB-9		1528126	593965		1.57	NO	11.81	0.48	11.77	11.84	63.359	3.2		7992	1469
196	1... 13C-PCB-52		683088	379937		0.80	NO	16.92	0.68	16.89	16.96	51.067	2.6		1882	1342
197	1... 13C-PCB-101		751291	291180		1.58	NO	20.58	0.83	20.55	20.62	59.177	3.0		966	656
198	1... 13C-PCB-138		971986	423007		1.30	NO	24.81	0.00	24.78	24.85	65.479	3.3		1767	1527
199	1... 13C-PCB-194		763909	405905		0.88	NO	30.98	1.25	30.95	31.01	66.654	3.3		1969	1534

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

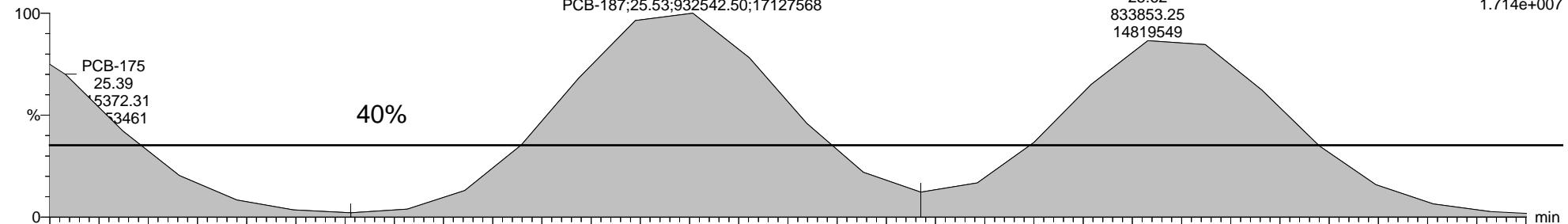
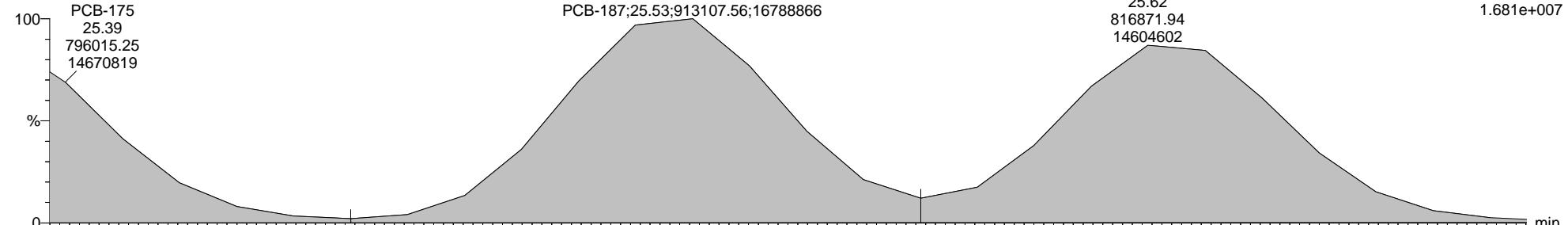
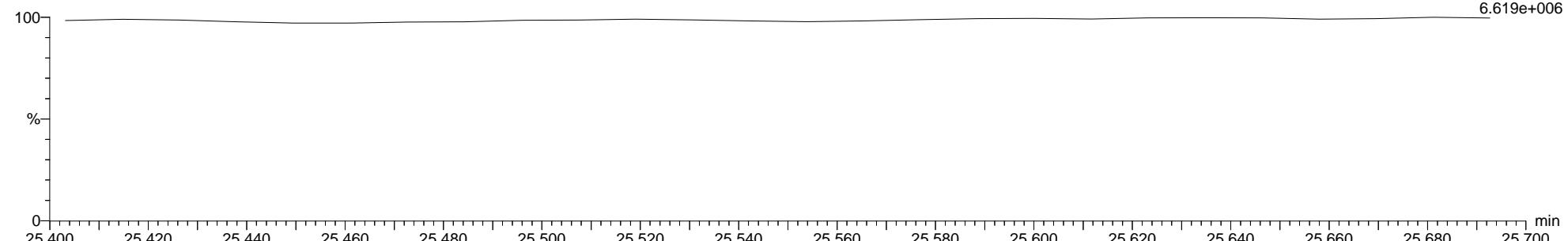
**Method: C:\MassLynx\PCB.PRO\MethDB\1668-OCTYL-1-209CAL-151130C.mdb 03 Dec 2015 18:01:35****Calibration: 08 Dec 2015 18:27:57****Name: 5-151207C17, Date: 08-Dec-2015, Time: 01:44:40, ID: H5-15-WDM-330, Description: 1668A-CS#6-015C, Vial: Tray1:1****\* PCB-34**5-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-3305-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-3305-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-330

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C17, Date: 08-Dec-2015, Time: 01:44:40, ID: H5-15-WDM-330, Description: 1668A-CS#6-015C, Vial: Tray1:1

**PCB-187**5-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-3305-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-3305-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-330

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C17, Date: 08-Dec-2015, Time: 01:44:40, ID: H5-15-WDM-330, Description: 1668A-CS#6-015C, Vial: Tray1:1

**\* PCB-1**

5-151207C17 Smooth(Mn,1x1)

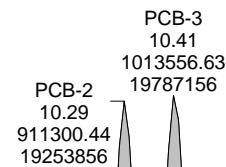
1668A-CS#6-015C H5-15-WDM-330

\* PCB-1

8.89

1059802.38

23735950



F1:Voltage SIR,EI+

188.0393

2.375e+007

5-151207C17 Smooth(Mn,1x1)

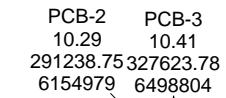
1668A-CS#6-015C H5-15-WDM-330

\* PCB-1

8.89

342631.53

7774038



F1:Voltage SIR,EI+

190.0363

7.781e+006

5-151207C17 Smooth(Mn,1x1)

1668A-CS#6-015C H5-15-WDM-330

\* PCB-1

8.89

31201428.00

15345516



F1:Voltage SIR,EI+

218.9856

2.633e+007

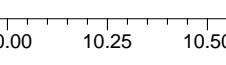
5-151207C17 Smooth(Mn,1x1)

1668A-CS#6-015C H5-15-WDM-330

9.29

31201428.00

15345516



F1:Voltage SIR,EI+

218.9856

2.633e+007

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

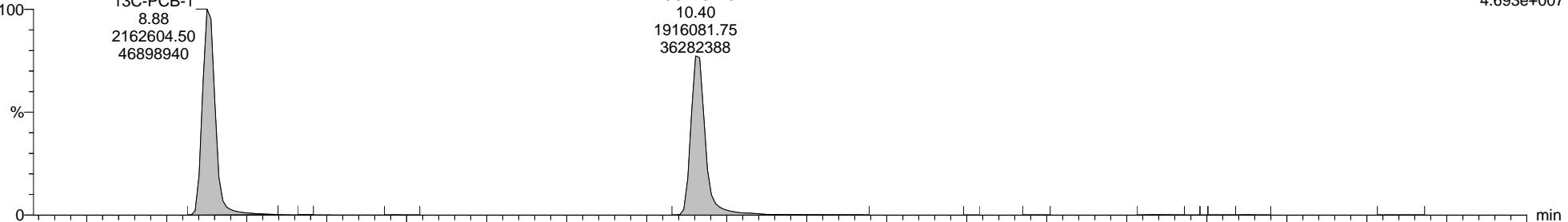
Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

**Name: 5-151207C17, Date: 08-Dec-2015, Time: 01:44:40, ID: H5-15-WDM-330, Description: 1668A-CS#6-015C, Vial: Tray1:1****13C-PCB-1**

5-151207C17 Smooth(Mn,1x1)

1668A-CS#6-015C H5-15-WDM-330

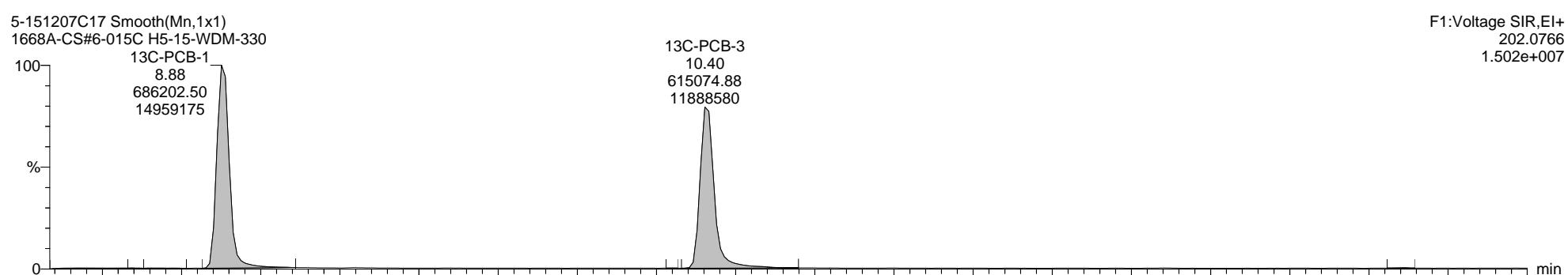
13C-PCB-1

8.88  
2162604.50  
46898940

5-151207C17 Smooth(Mn,1x1)

1668A-CS#6-015C H5-15-WDM-330

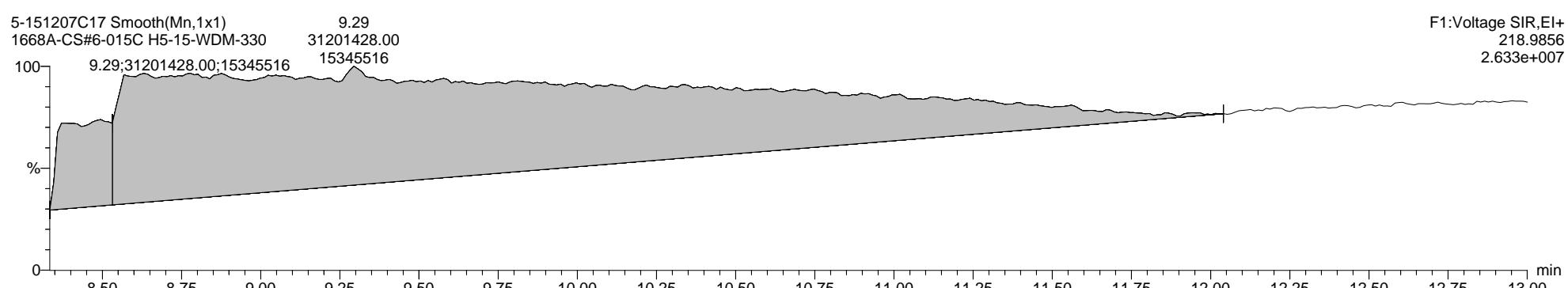
13C-PCB-1

8.88  
686202.50  
14959175

5-151207C17 Smooth(Mn,1x1)

1668A-CS#6-015C H5-15-WDM-330

13C-PCB-1

9.29  
31201428.00;15345516

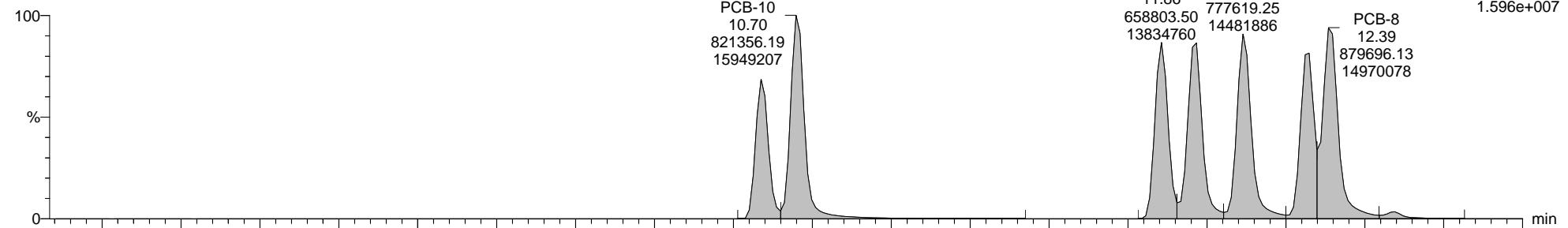
Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time  
Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

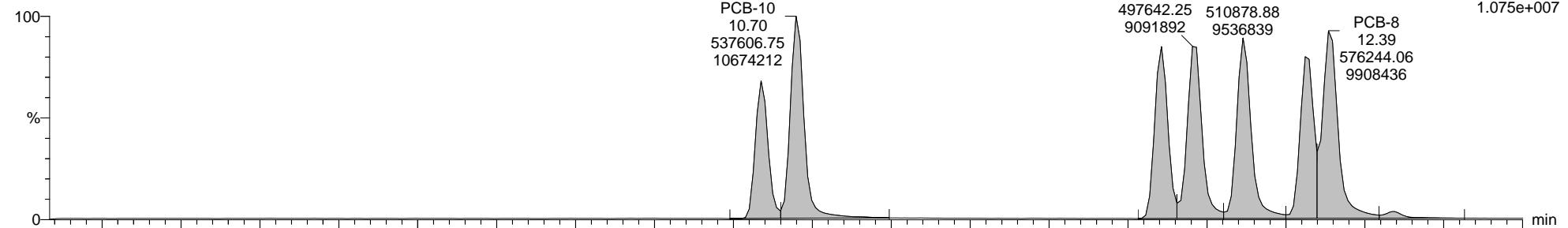
Name: 5-151207C17, Date: 08-Dec-2015, Time: 01:44:40, ID: H5-15-WDM-330, Description: 1668A-CS#6-015C, Vial: Tray1:1

\* PCB-4

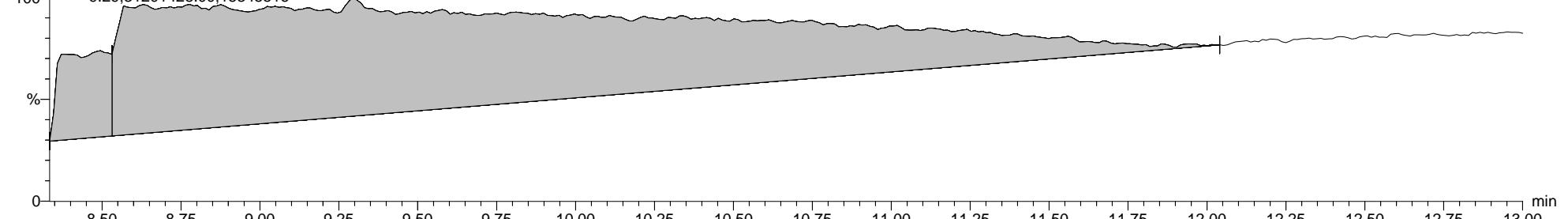
5-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-330



5-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-330



5-151207C17 Smooth(Mn,1x1) 9.29  
1668A-CS#6-015C H5-15-WDM-330 31201428.00  
100- 9.29:31201428.00:15345516 15345516



Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

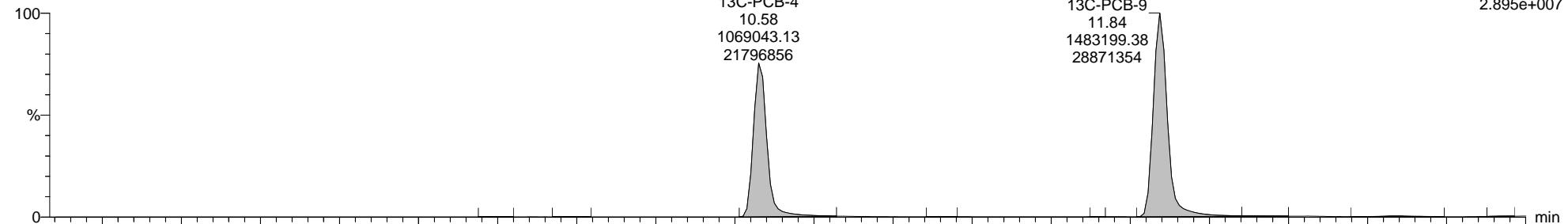
Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

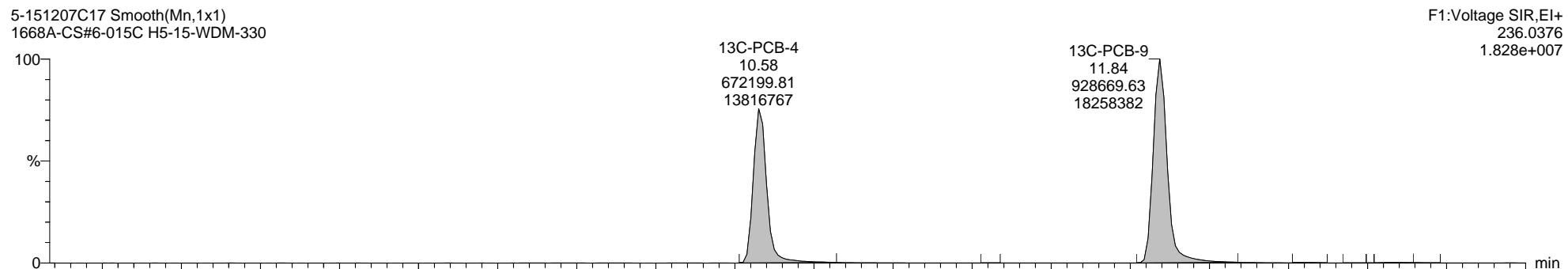
Name: 5-151207C17, Date: 08-Dec-2015, Time: 01:44:40, ID: H5-15-WDM-330, Description: 1668A-CS#6-015C, Vial: Tray1:1

### 13C-PCB-4

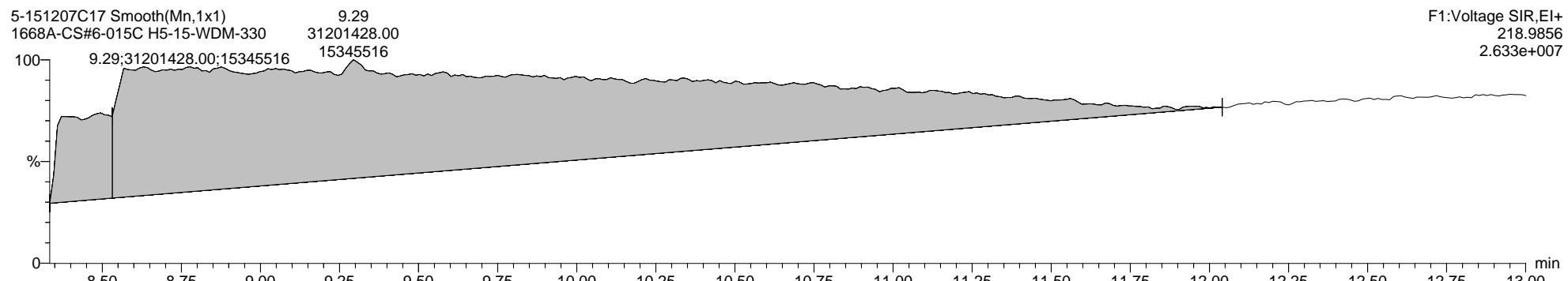
5-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-330



5-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-330



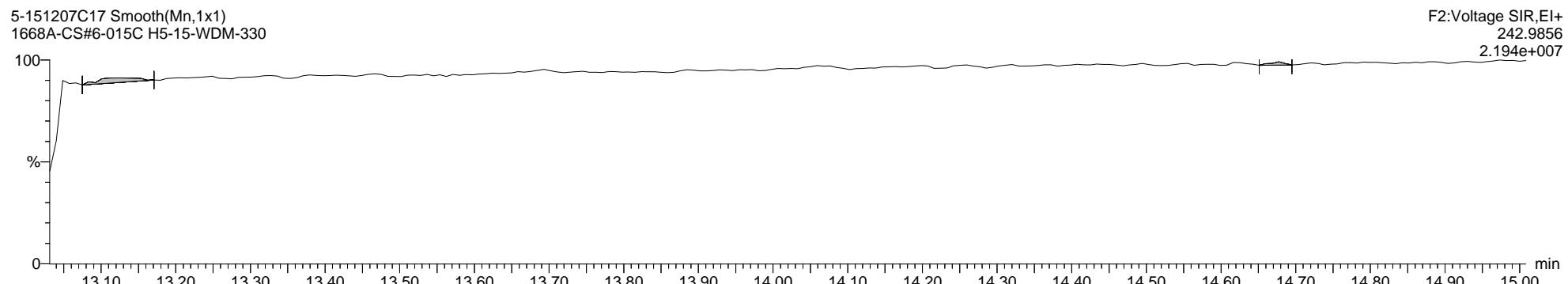
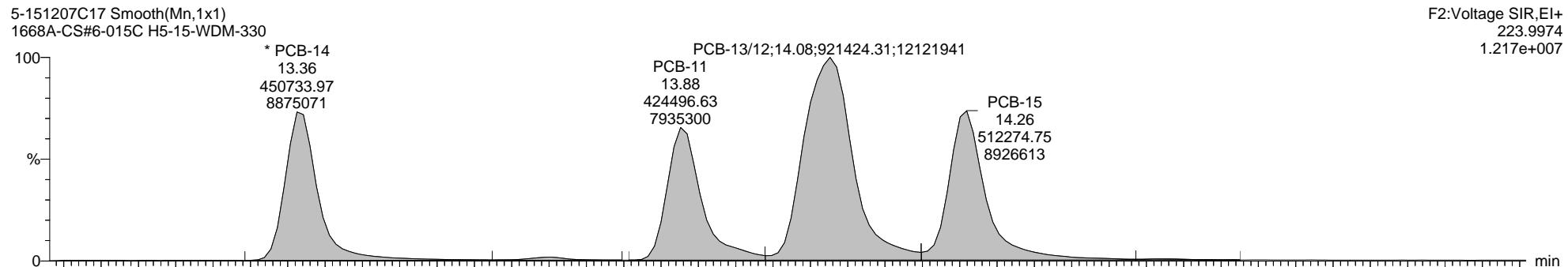
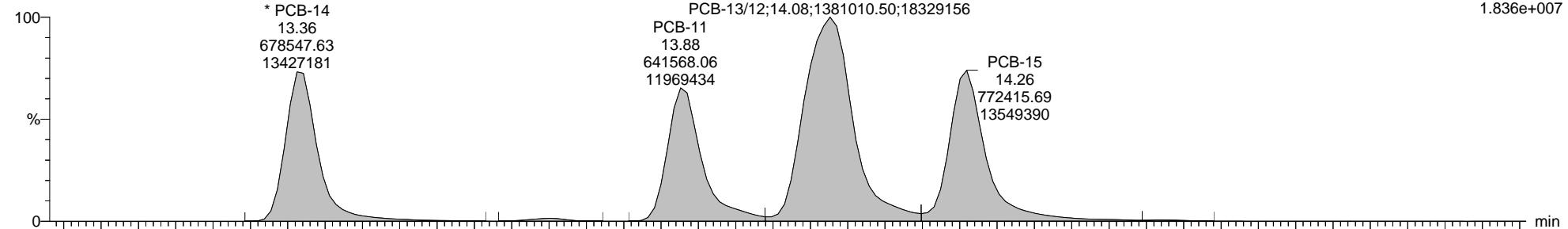
5-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-330  
9.29  
31201428.00;15345516



Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

**Name: 5-151207C17, Date: 08-Dec-2015, Time: 01:44:40, ID: H5-15-WDM-330, Description: 1668A-CS#6-015C, Vial: Tray1:1****PCB-15**5-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-330

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C17, Date: 08-Dec-2015, Time: 01:44:40, ID: H5-15-WDM-330, Description: 1668A-CS#6-015C, Vial: Tray1:1

### 13C-PCB-15

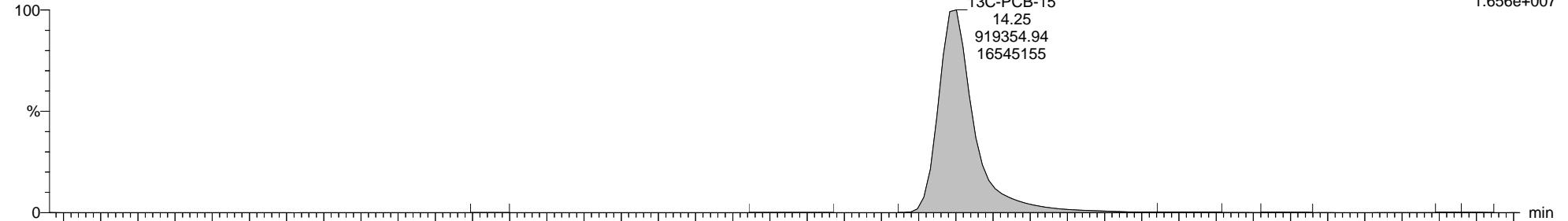
5-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-330

F2:Voltage SIR,EI+  
234.0406  
2.636e+007



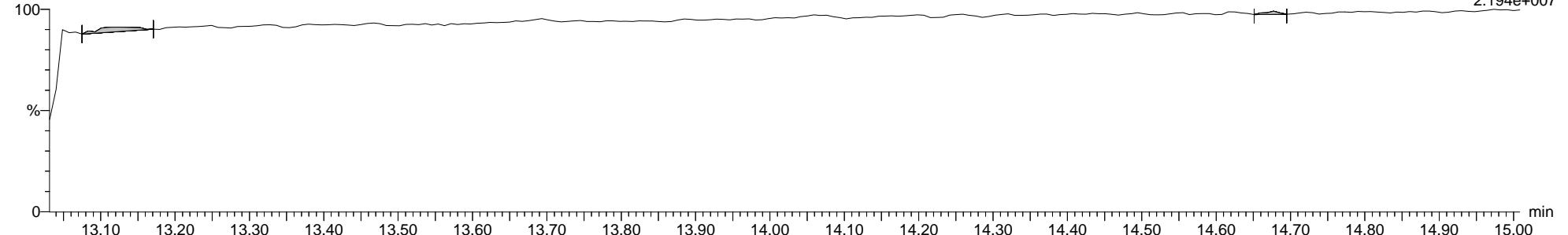
5-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-330

F2:Voltage SIR,EI+  
236.0376  
1.656e+007



5-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-330

F2:Voltage SIR,EI+  
242.9856  
2.194e+007



Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

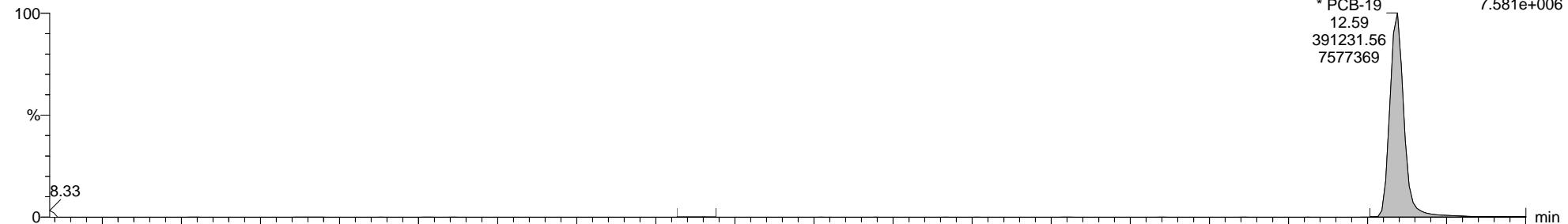
Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C17, Date: 08-Dec-2015, Time: 01:44:40, ID: H5-15-WDM-330, Description: 1668A-CS#6-015C, Vial: Tray1:1

\* PCB-19

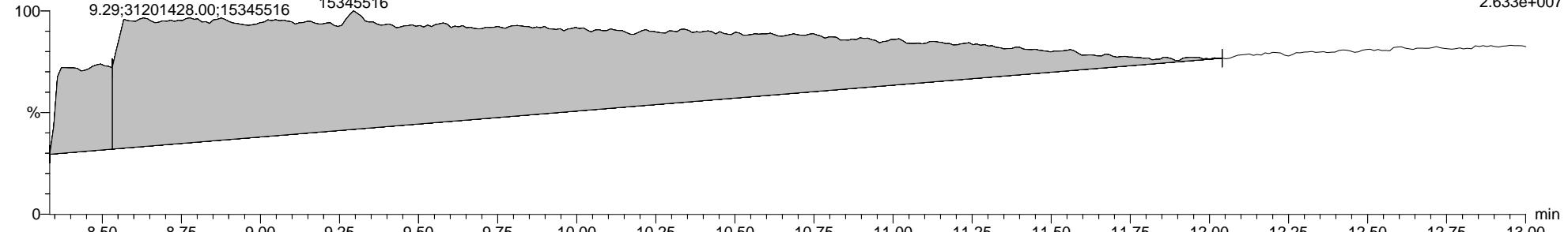
5-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-330



5-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-330



5-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-330

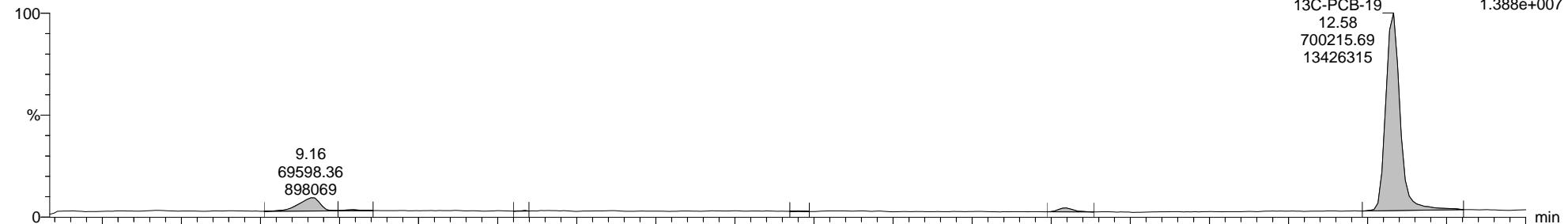
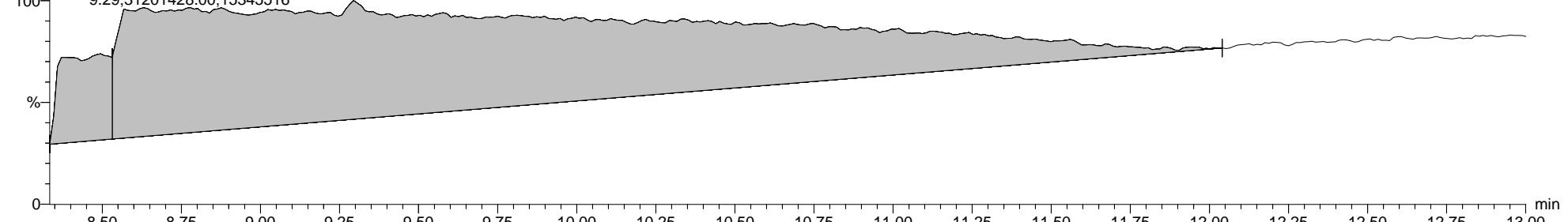


Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C17, Date: 08-Dec-2015, Time: 01:44:40, ID: H5-15-WDM-330, Description: 1668A-CS#6-015C, Vial: Tray1:1

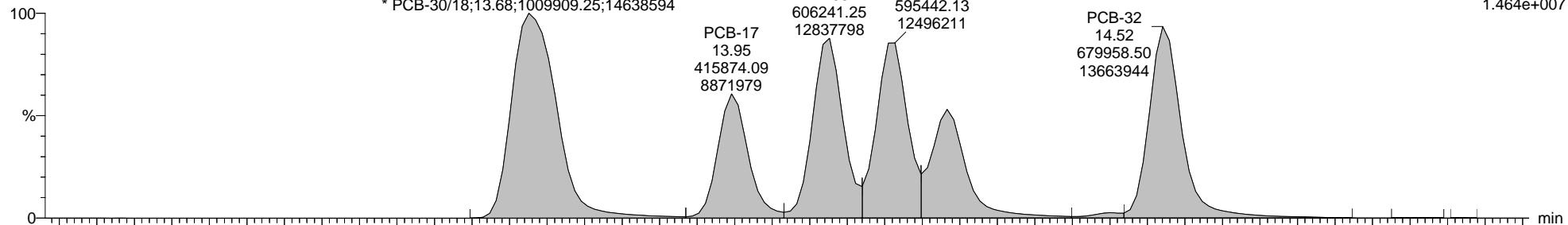
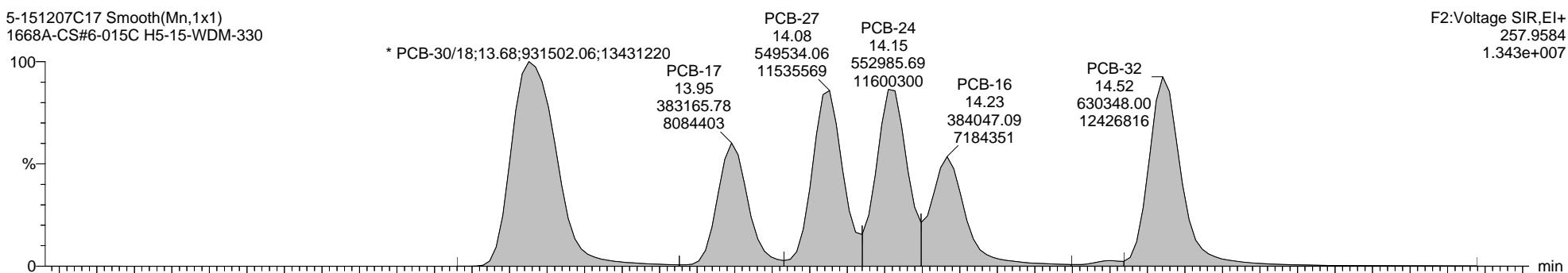
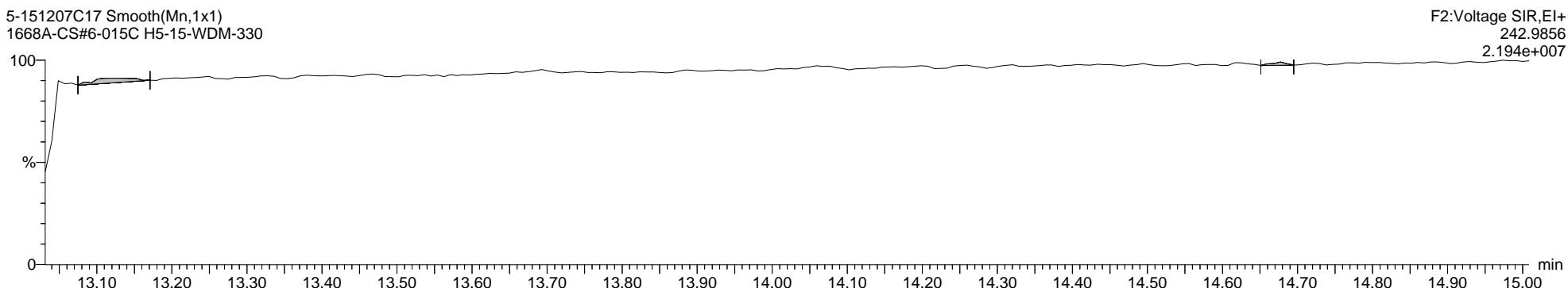
**13C-PCB-19**5-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-3305-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-3305-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-330  
9.29, 31201428.00; 15345516

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C17, Date: 08-Dec-2015, Time: 01:44:40, ID: H5-15-WDM-330, Description: 1668A-CS#6-015C, Vial: Tray1:1

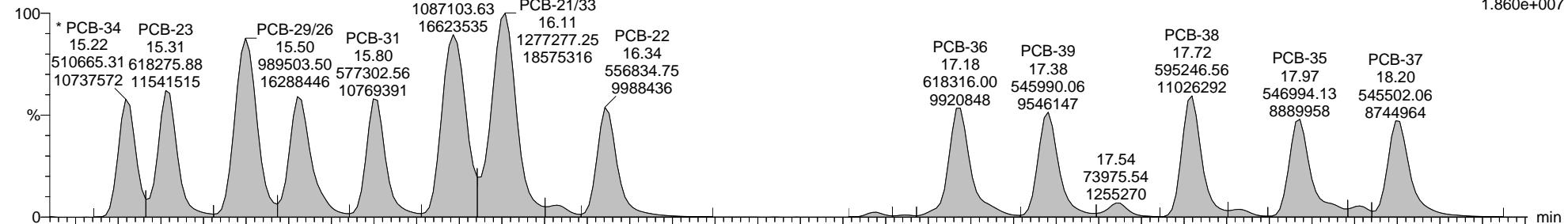
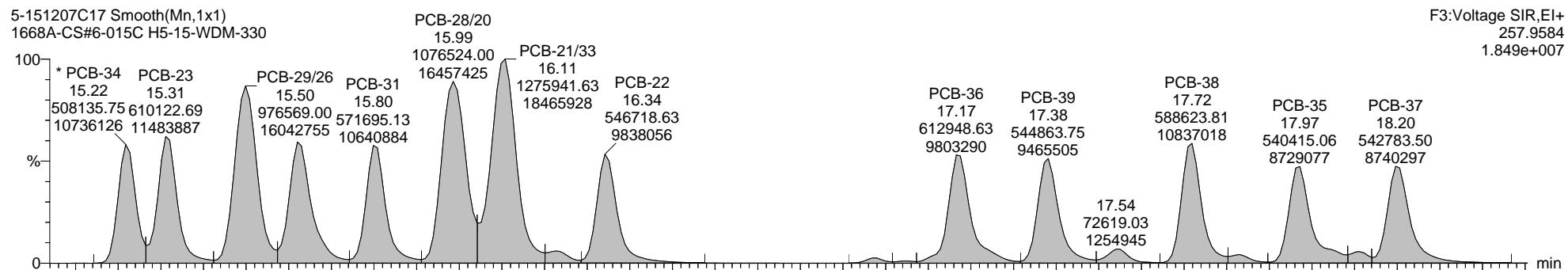
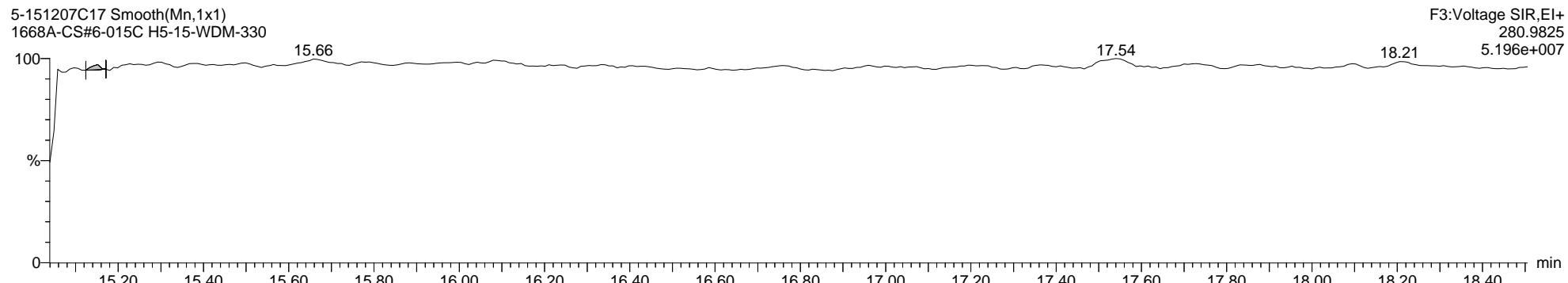
**\* PCB-30/18**5-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-3305-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-3305-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-330

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C17, Date: 08-Dec-2015, Time: 01:44:40, ID: H5-15-WDM-330, Description: 1668A-CS#6-015C, Vial: Tray1:1

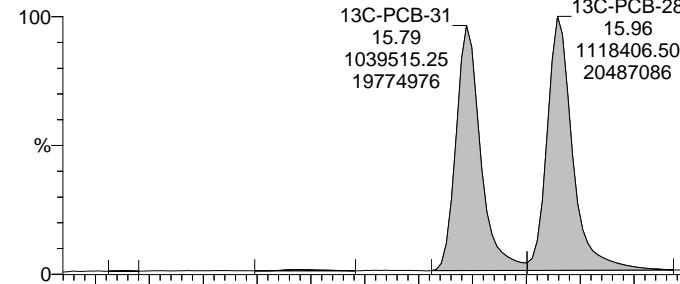
**PCB-37**5-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-3305-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-3305-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-330

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

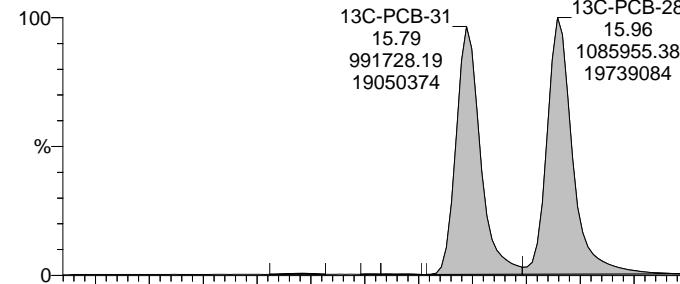
Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C17, Date: 08-Dec-2015, Time: 01:44:40, ID: H5-15-WDM-330, Description: 1668A-CS#6-015C, Vial: Tray1:1

**13C-PCB-37**5-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-330

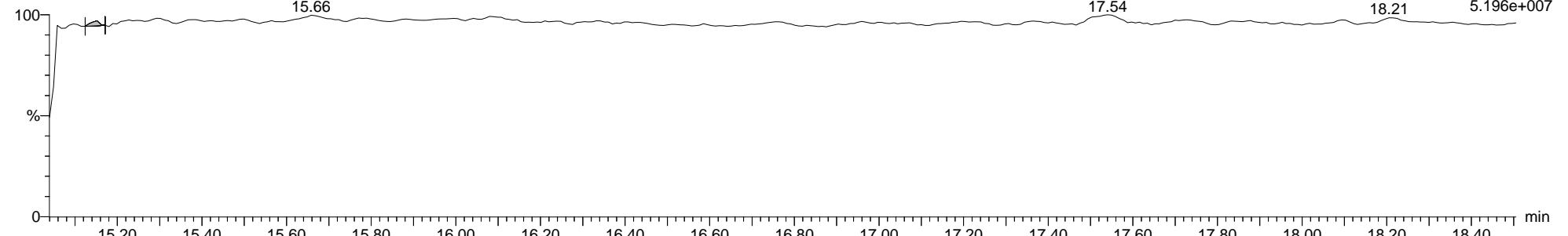
13C-PCB-37  
18.19  
1070850.25  
17714126

F3:Voltage SIR,EI+  
268.0016  
2.081e+007

5-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-330

13C-PCB-37  
18.19  
1019704.81  
17036618

F3:Voltage SIR,EI+  
269.9986  
1.983e+007

5-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-330

F3:Voltage SIR,EI+  
280.9825  
5.196e+007

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

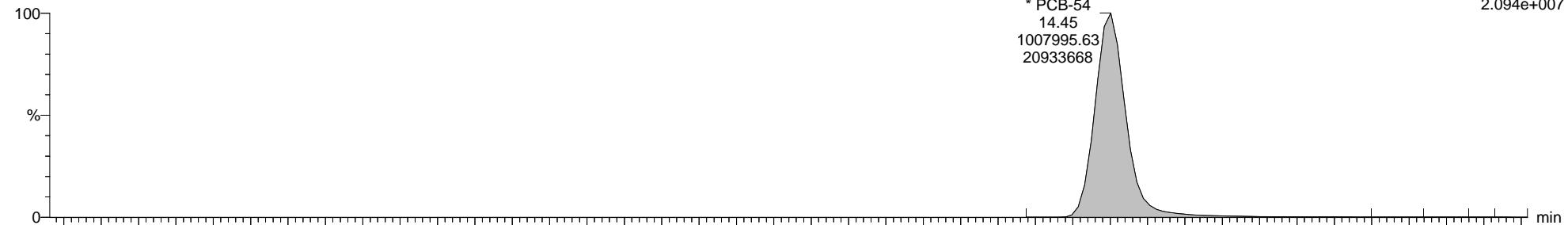
Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

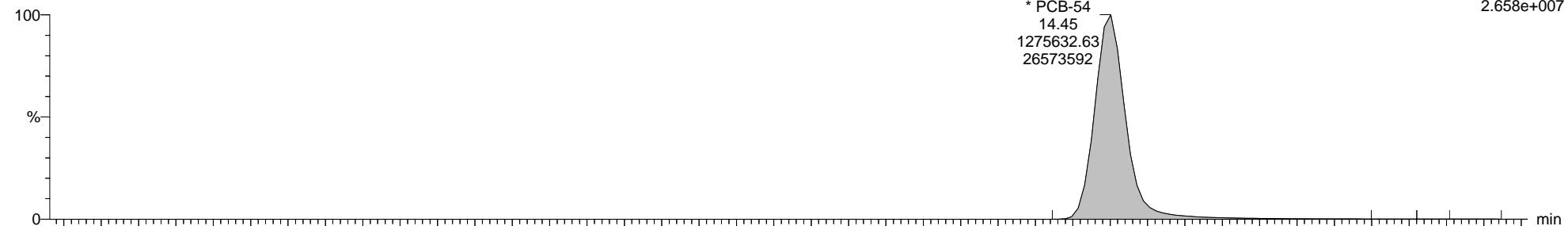
Name: 5-151207C17, Date: 08-Dec-2015, Time: 01:44:40, ID: H5-15-WDM-330, Description: 1668A-CS#6-015C, Vial: Tray1:1

\* PCB-54

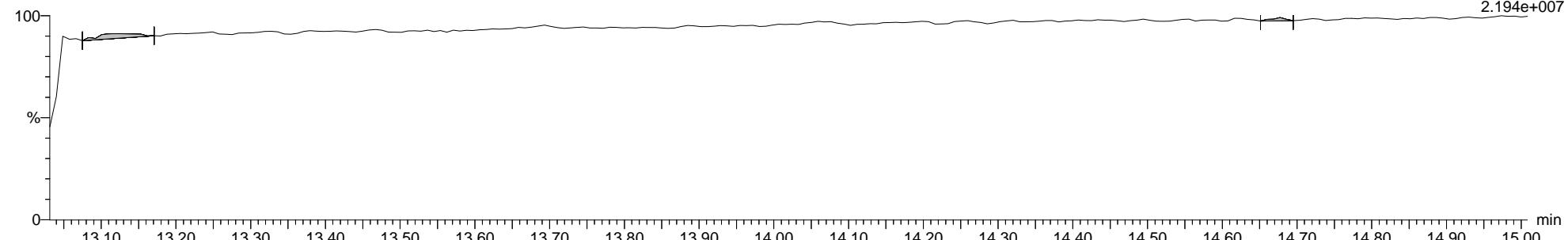
5-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-330



5-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-330



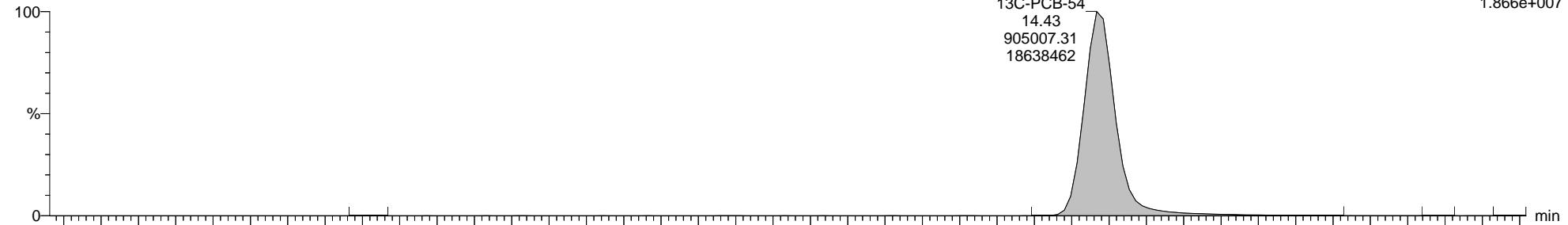
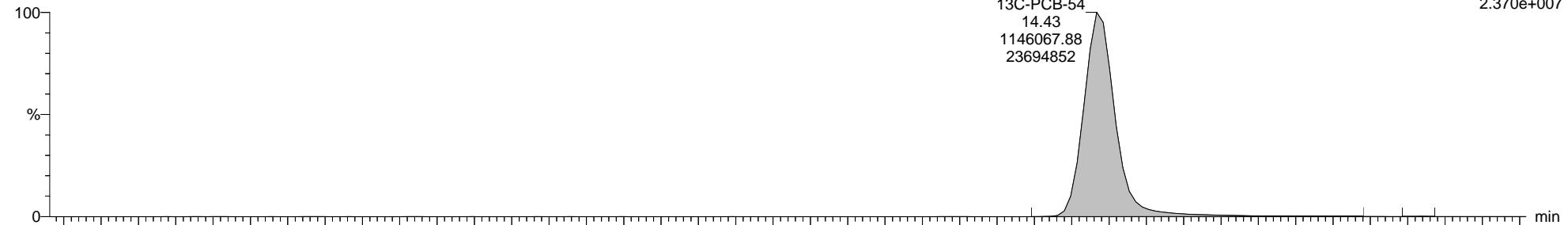
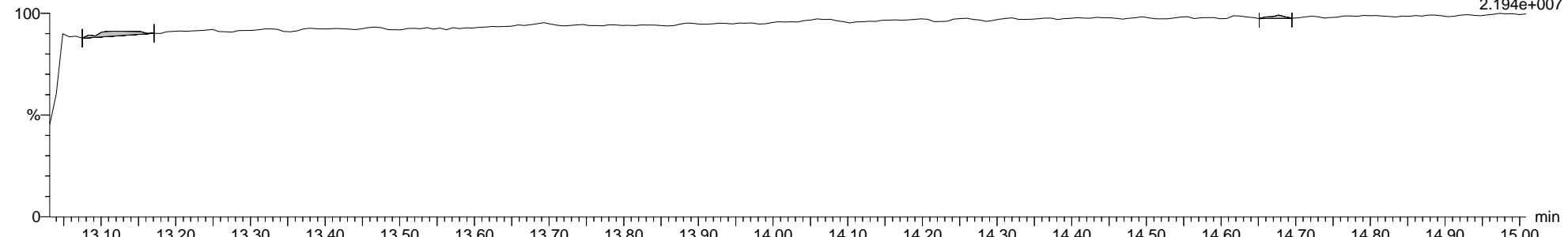
5-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-330



Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

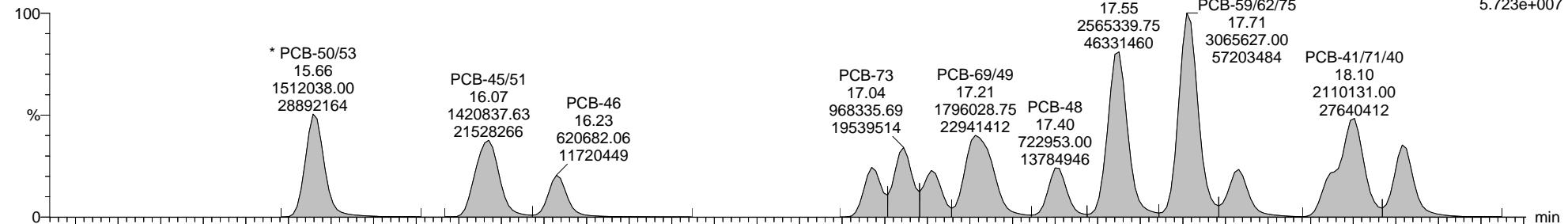
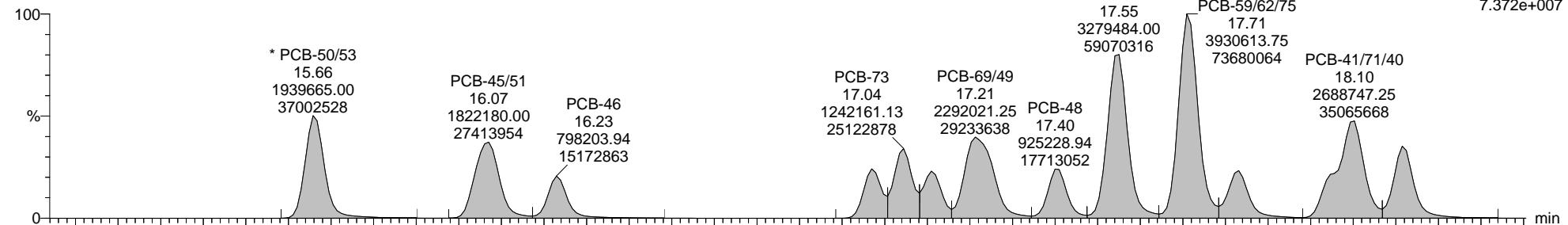
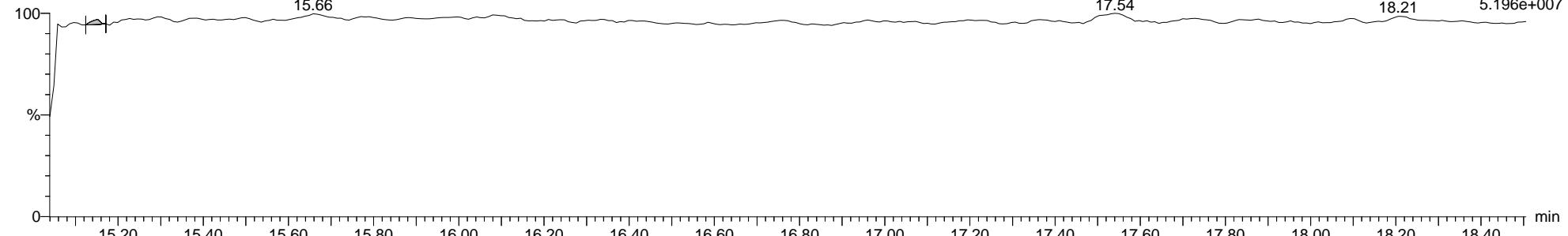
**Name: 5-151207C17, Date: 08-Dec-2015, Time: 01:44:40, ID: H5-15-WDM-330, Description: 1668A-CS#6-015C, Vial: Tray1:1****13C-PCB-54**5-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-3305-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-3305-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-330

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C17, Date: 08-Dec-2015, Time: 01:44:40, ID: H5-15-WDM-330, Description: 1668A-CS#6-015C, Vial: Tray1:1

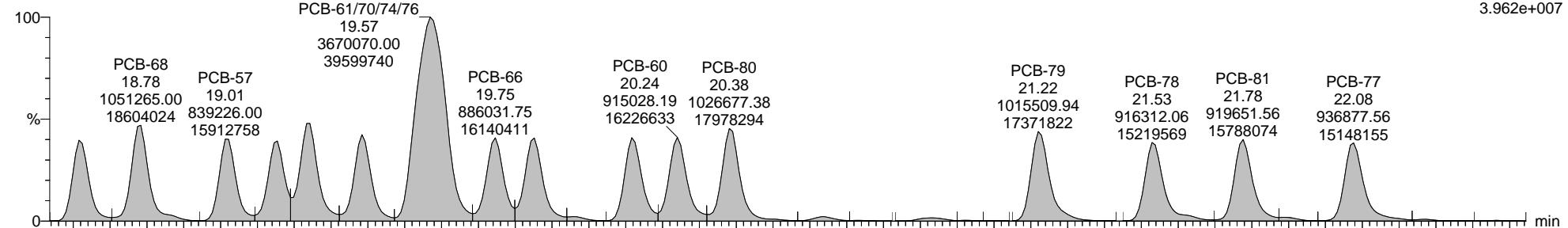
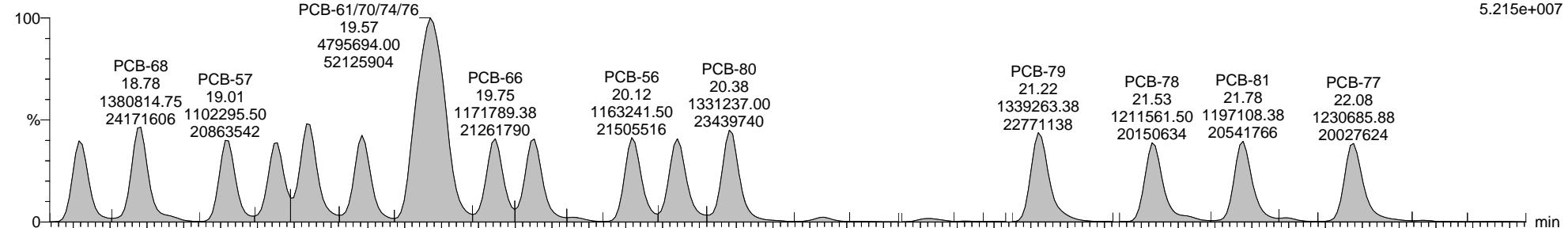
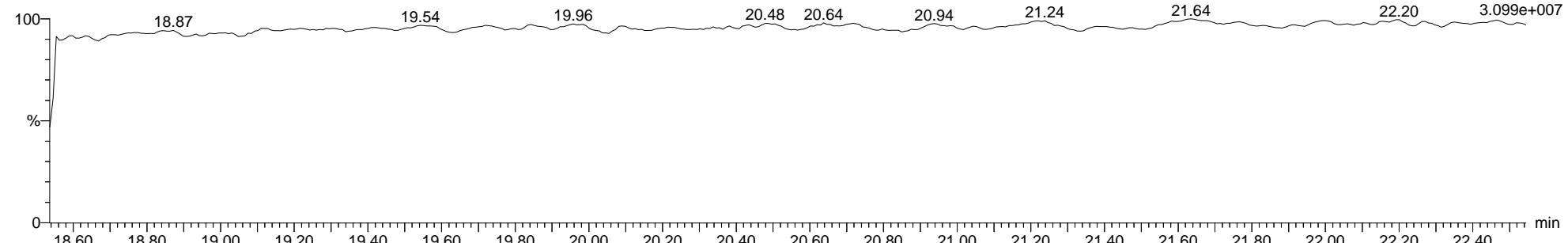
**\* PCB-50/53**5-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-3305-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-3305-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-330

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

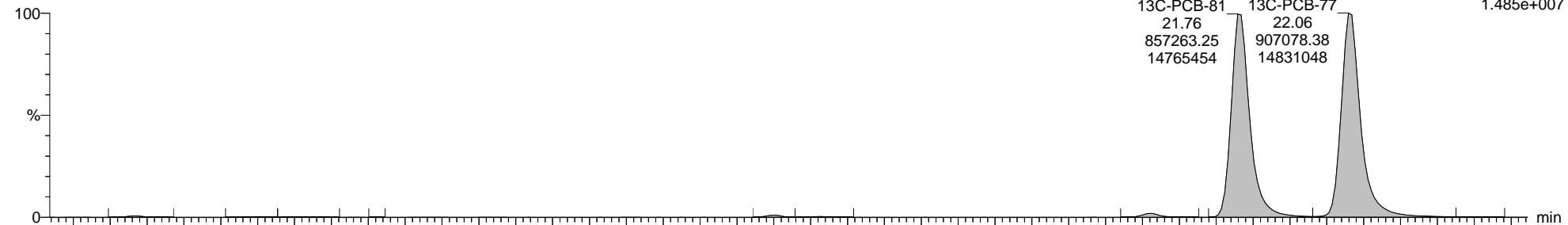
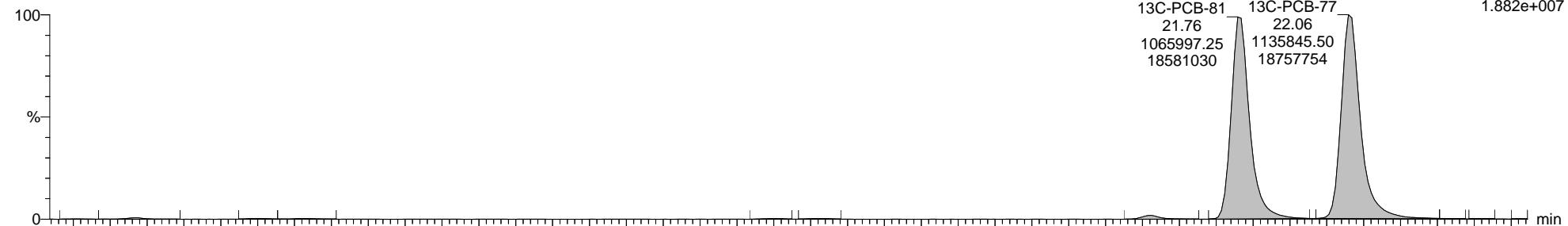
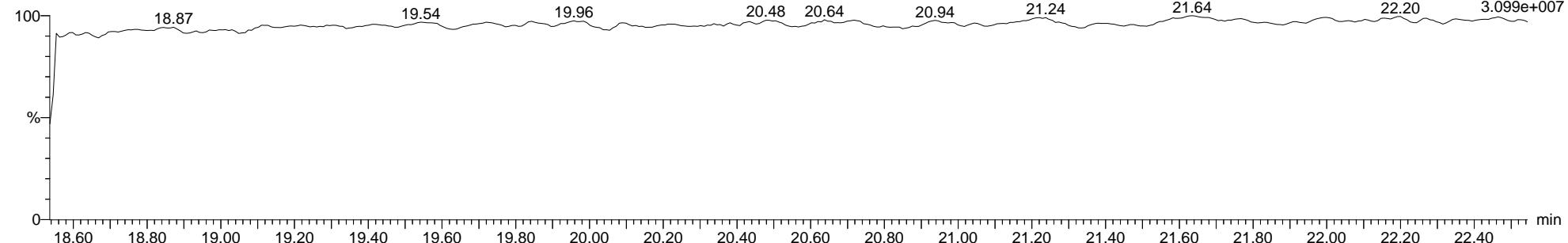
Name: 5-151207C17, Date: 08-Dec-2015, Time: 01:44:40, ID: H5-15-WDM-330, Description: 1668A-CS#6-015C, Vial: Tray1:1

**PCB-81**5-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-3305-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-3305-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-330

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

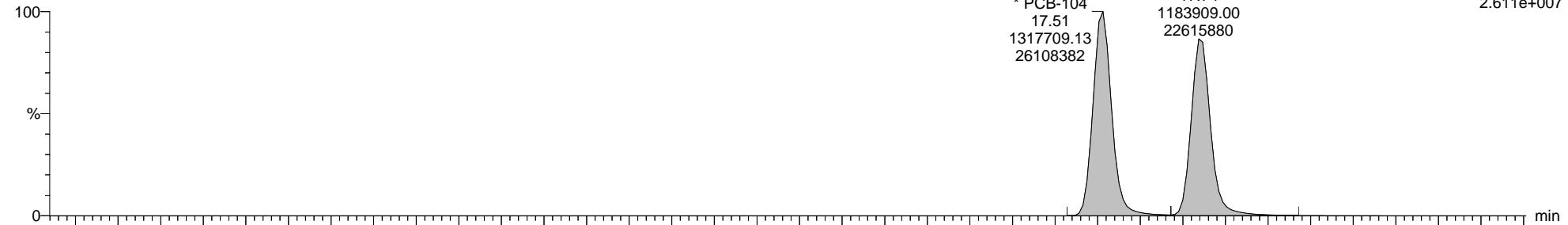
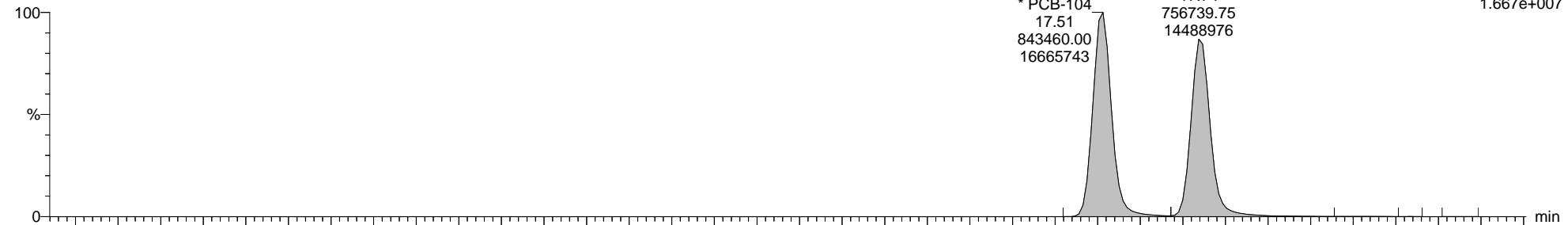
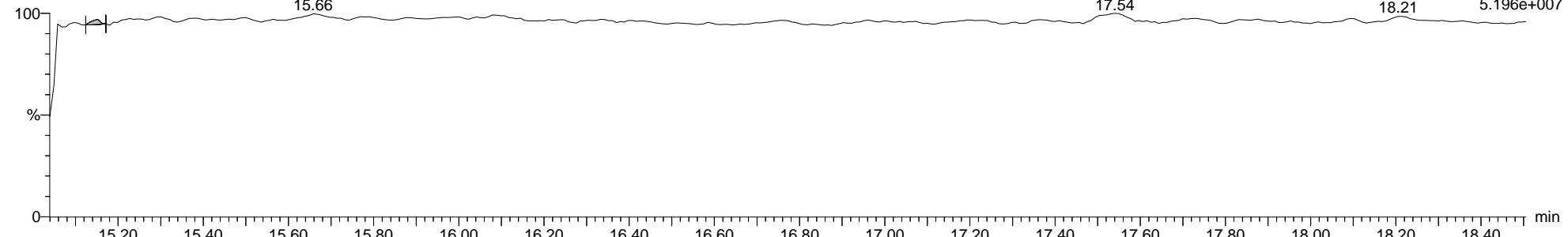
Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

**Name: 5-151207C17, Date: 08-Dec-2015, Time: 01:44:40, ID: H5-15-WDM-330, Description: 1668A-CS#6-015C, Vial: Tray1:1****13C-PCB-81**5-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-3305-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-3305-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-330

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

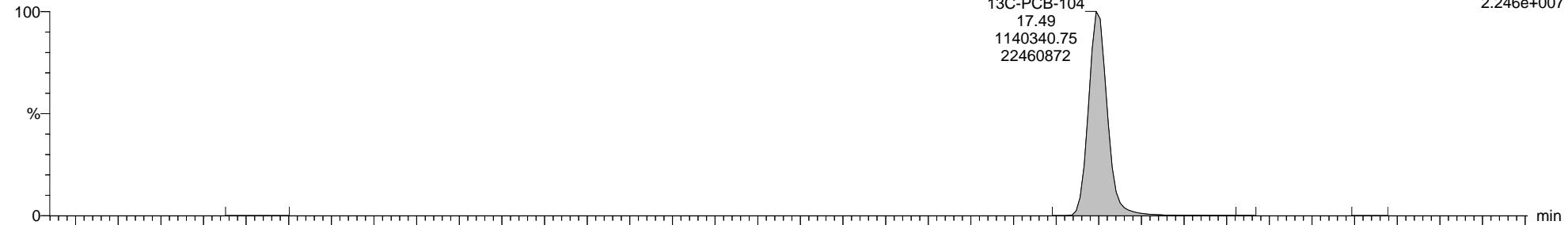
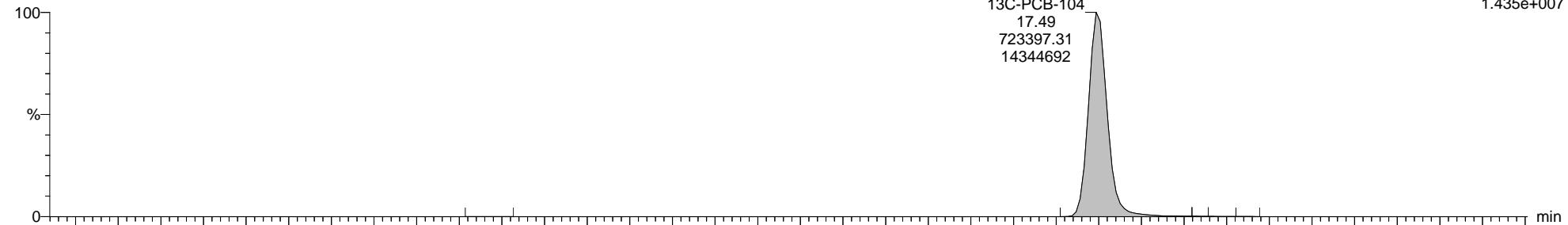
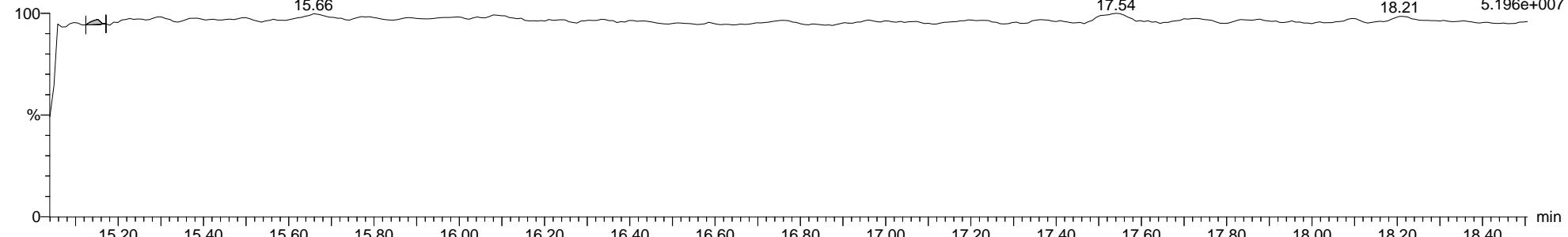
Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

**Name: 5-151207C17, Date: 08-Dec-2015, Time: 01:44:40, ID: H5-15-WDM-330, Description: 1668A-CS#6-015C, Vial: Tray1:1****\* PCB-104**5-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-3305-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-3305-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-330

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

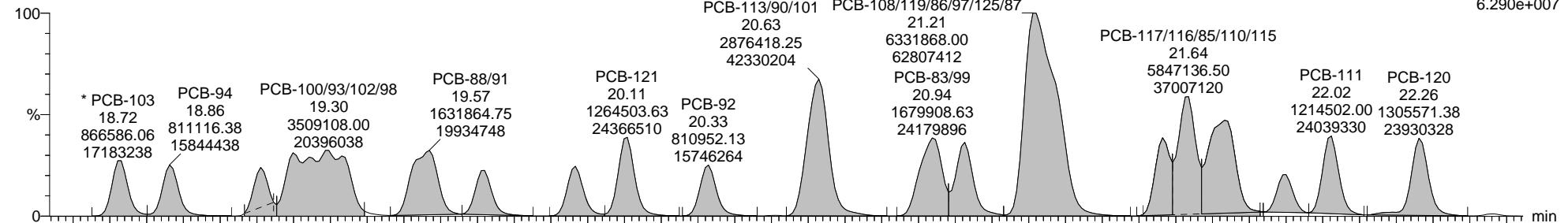
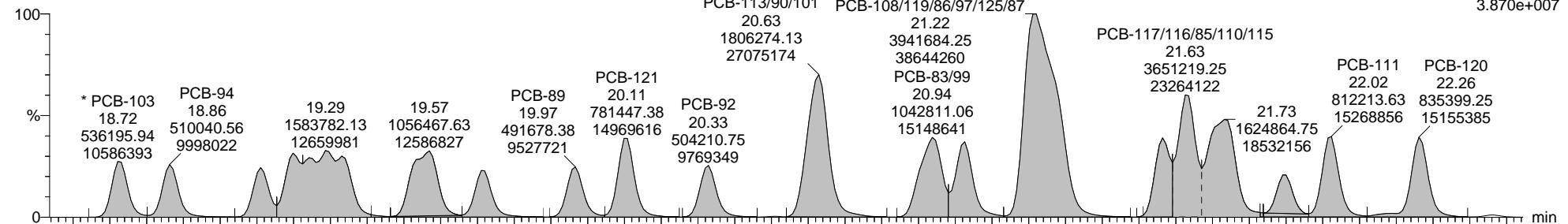
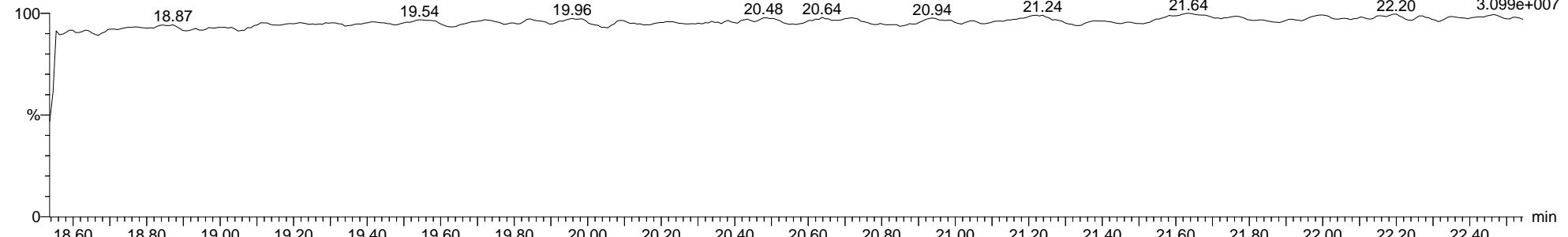
**Name: 5-151207C17, Date: 08-Dec-2015, Time: 01:44:40, ID: H5-15-WDM-330, Description: 1668A-CS#6-015C, Vial: Tray1:1****13C-PCB-104**5-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-3305-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-3305-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-330

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C17, Date: 08-Dec-2015, Time: 01:44:40, ID: H5-15-WDM-330, Description: 1668A-CS#6-015C, Vial: Tray1:1

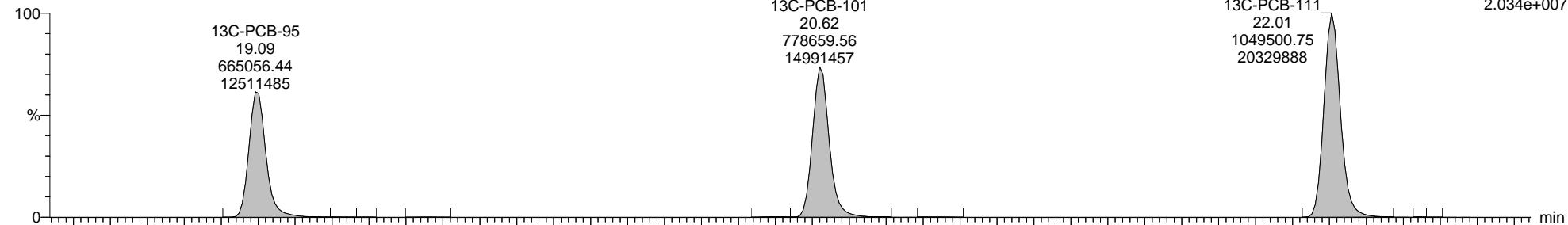
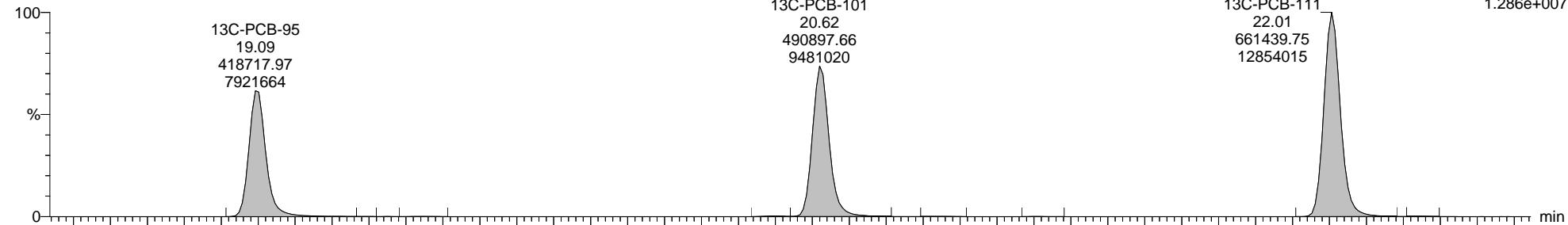
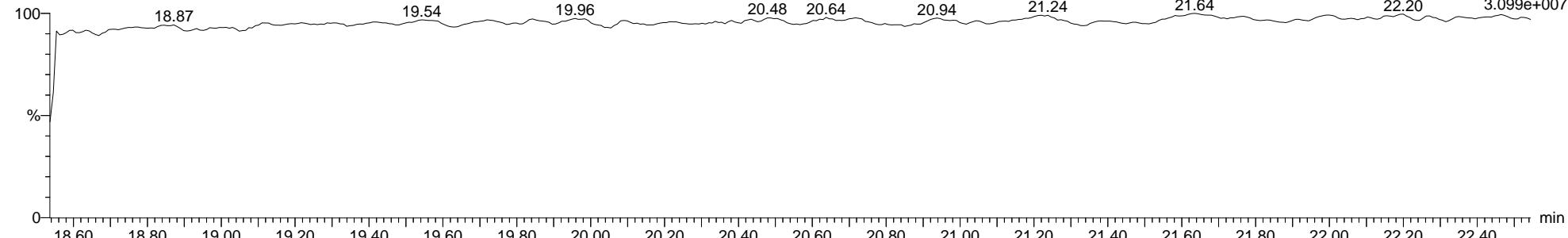
**PCB-113/90/101**5-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-3305-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-3305-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-330

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

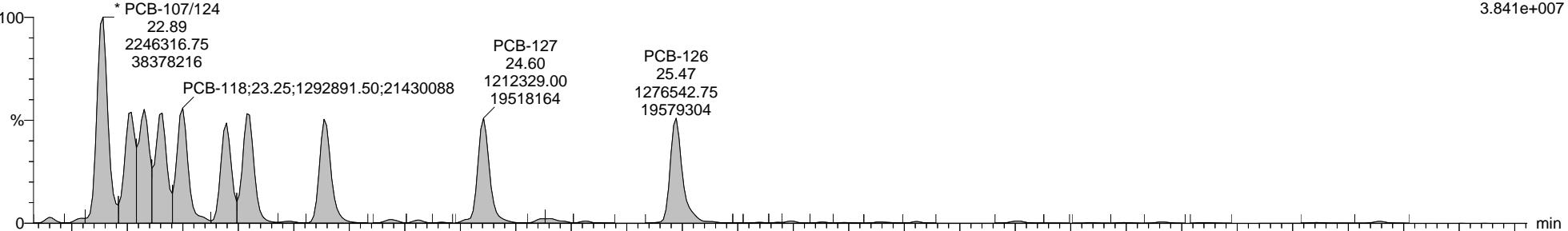
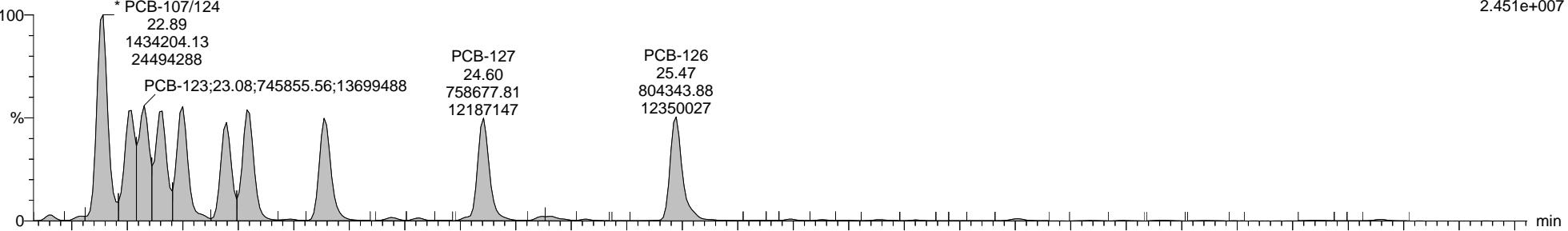
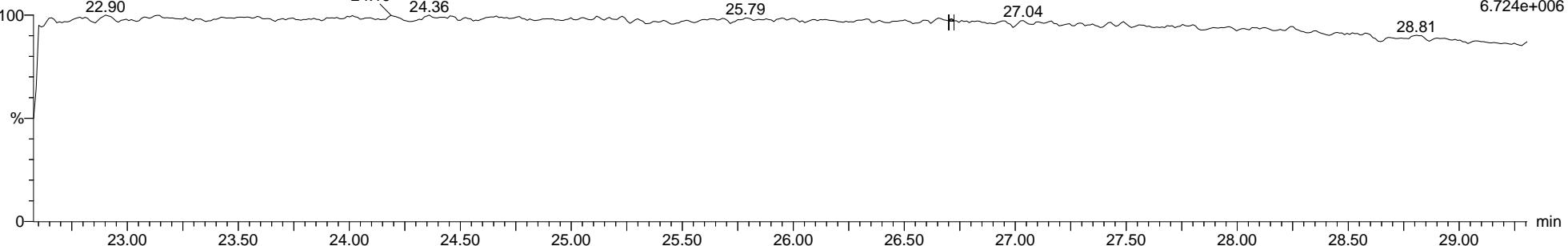
Name: 5-151207C17, Date: 08-Dec-2015, Time: 01:44:40, ID: H5-15-WDM-330, Description: 1668A-CS#6-015C, Vial: Tray1:1

**13C-PCB-101**5-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-3305-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-3305-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-330

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

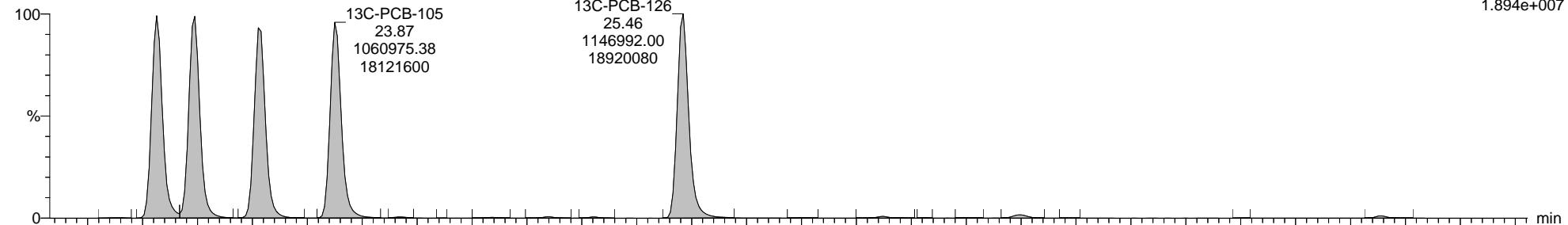
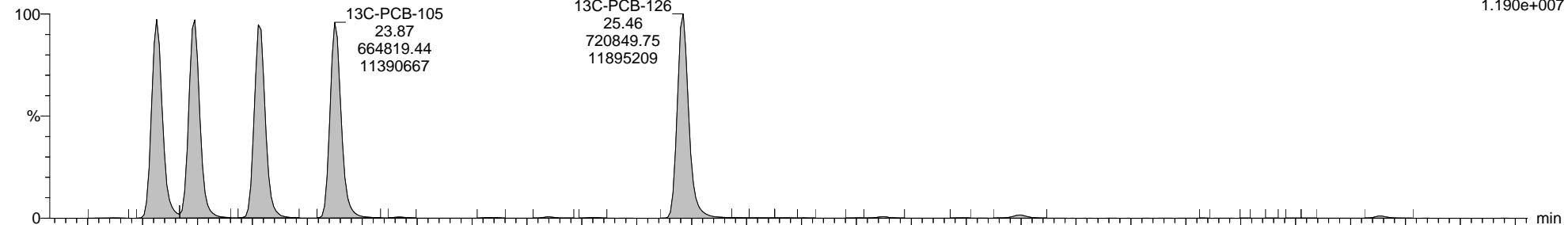
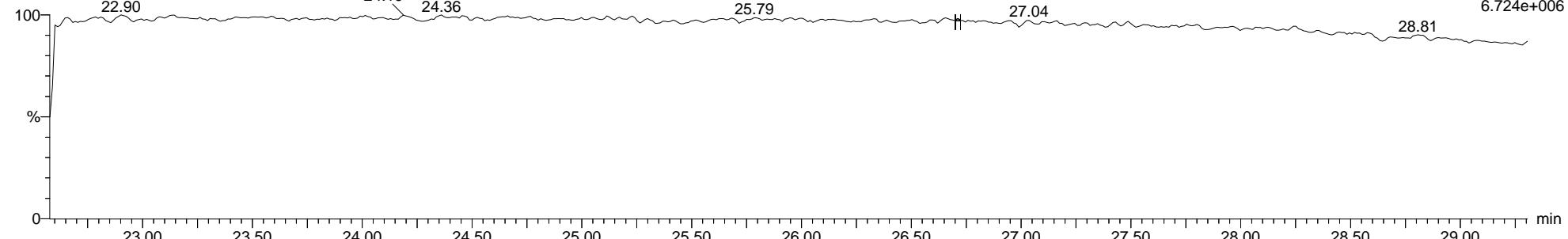
**Name: 5-151207C17, Date: 08-Dec-2015, Time: 01:44:40, ID: H5-15-WDM-330, Description: 1668A-CS#6-015C, Vial: Tray1:1****PCB-123**5-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-330  
\* PCB-107/1245-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-330  
\* PCB-107/1245-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-330

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C17, Date: 08-Dec-2015, Time: 01:44:40, ID: H5-15-WDM-330, Description: 1668A-CS#6-015C, Vial: Tray1:1

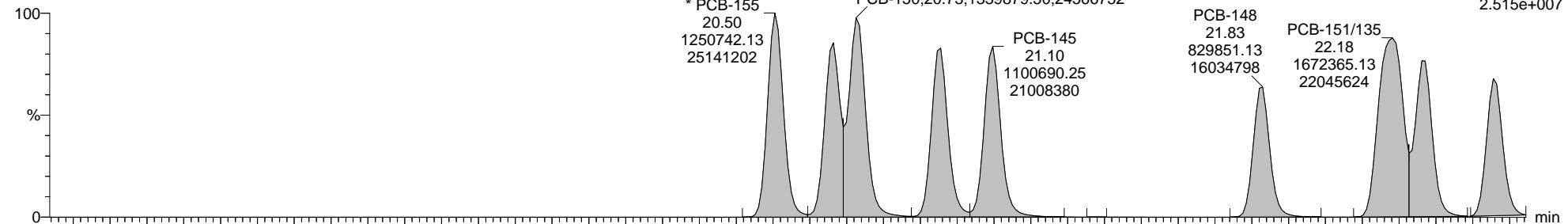
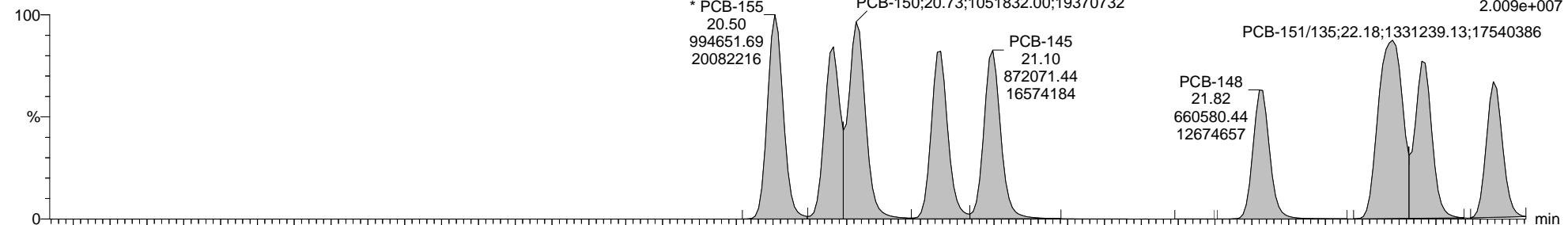
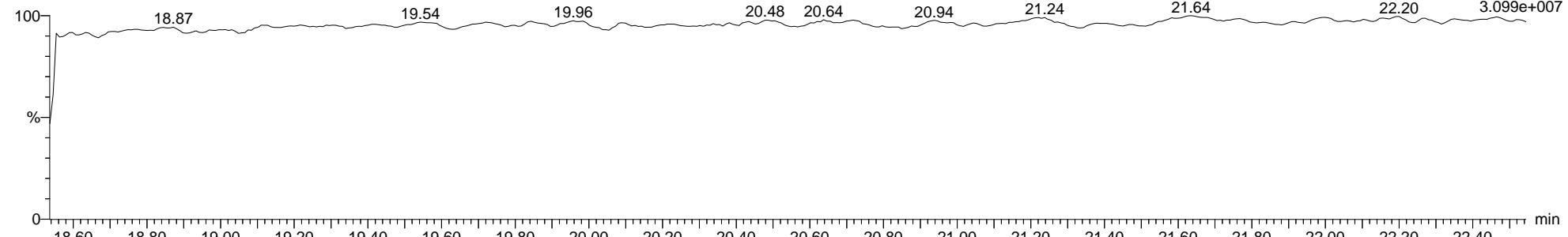
**13C-PCB-123**5-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-3305-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-3305-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-330

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C17, Date: 08-Dec-2015, Time: 01:44:40, ID: H5-15-WDM-330, Description: 1668A-CS#6-015C, Vial: Tray1:1

**\* PCB-155**5-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-3305-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-3305-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-330

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

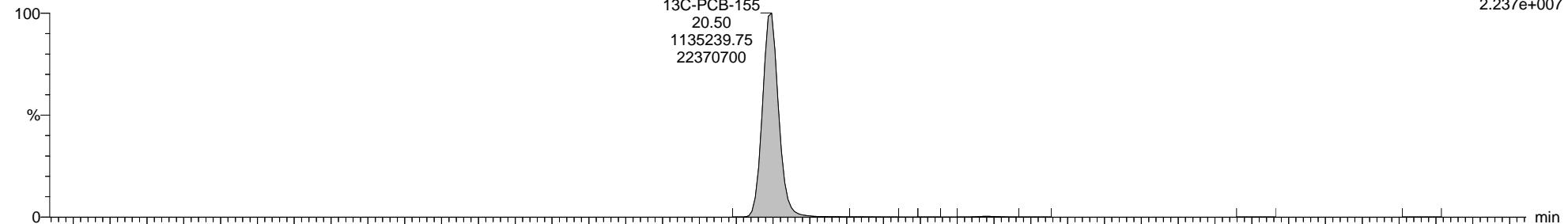
Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

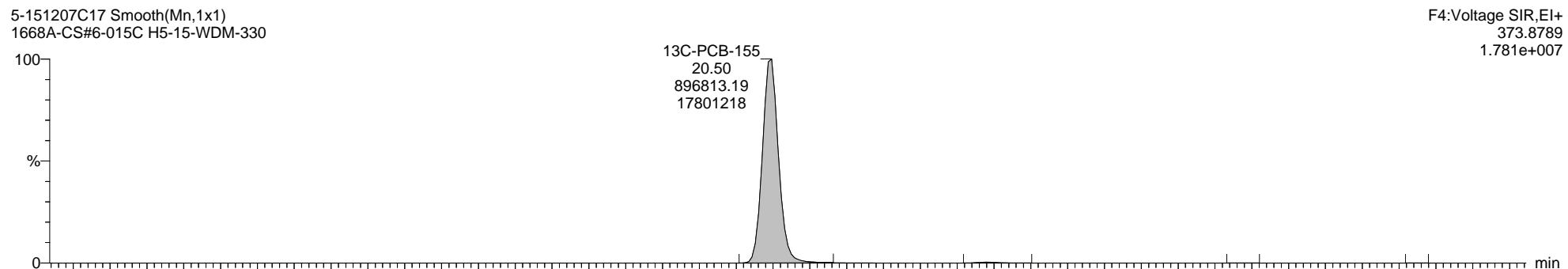
Name: 5-151207C17, Date: 08-Dec-2015, Time: 01:44:40, ID: H5-15-WDM-330, Description: 1668A-CS#6-015C, Vial: Tray1:1

### 13C-PCB-155

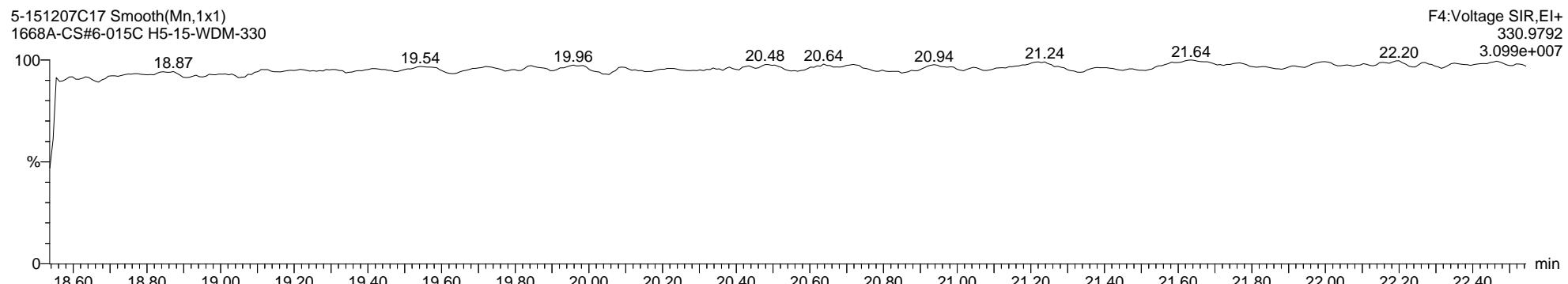
5-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-330



5-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-330



5-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-330

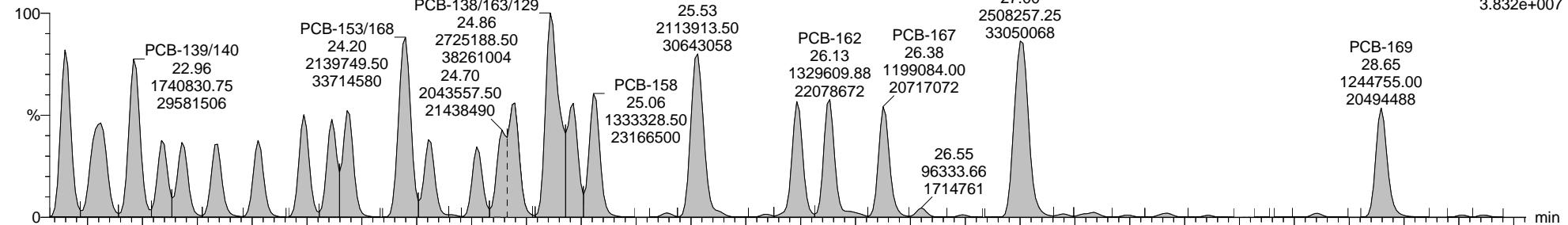
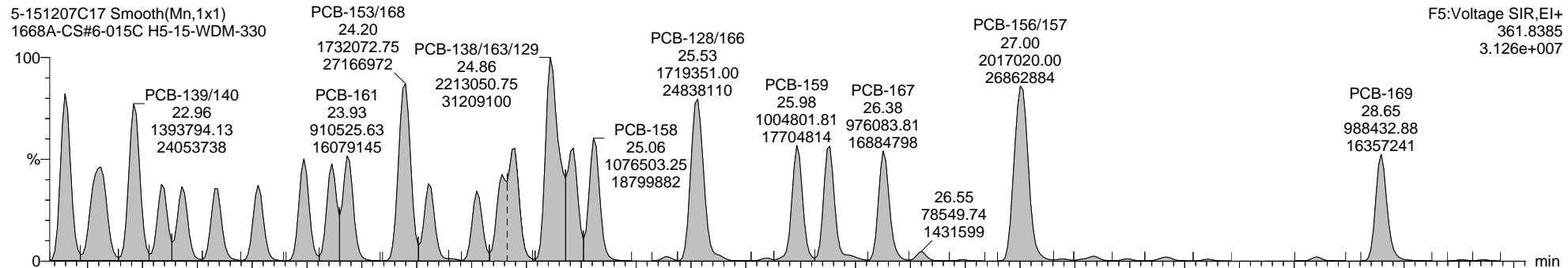
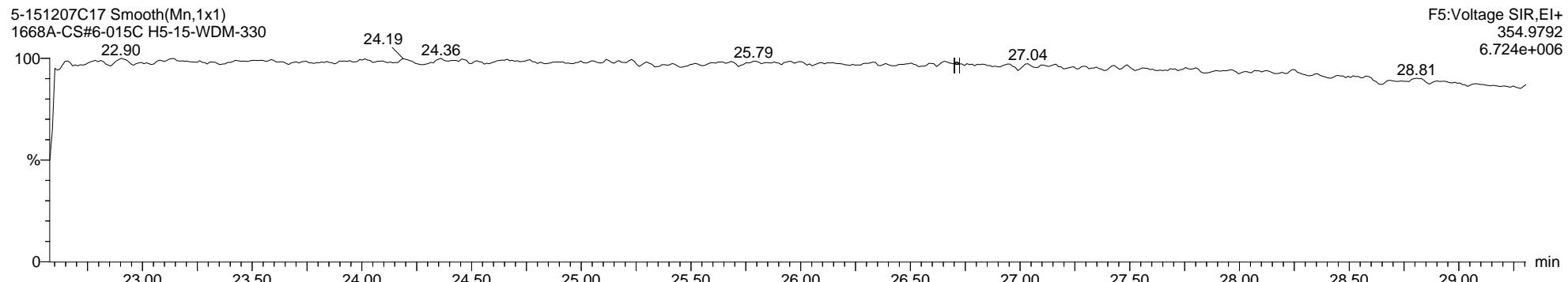


Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

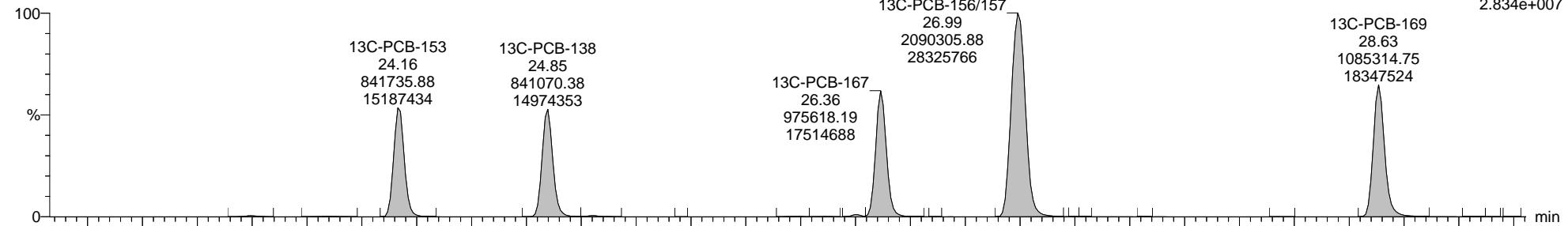
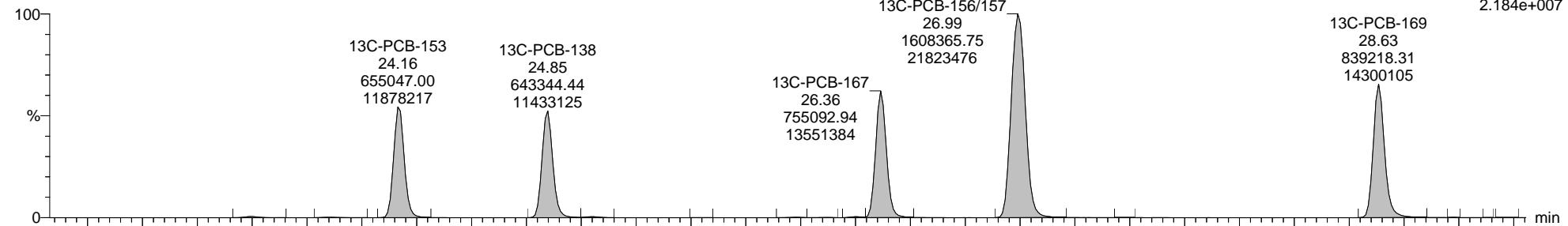
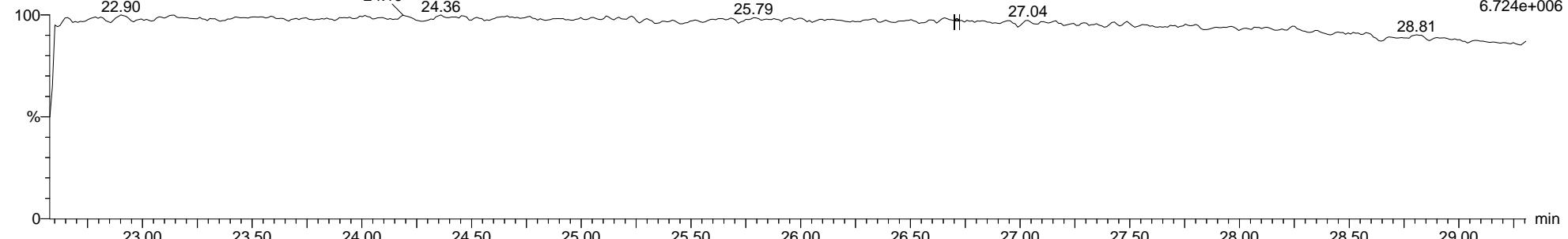
Name: 5-151207C17, Date: 08-Dec-2015, Time: 01:44:40, ID: H5-15-WDM-330, Description: 1668A-CS#6-015C, Vial: Tray1:1

**PCB-167**5-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-3305-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-3305-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-330

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

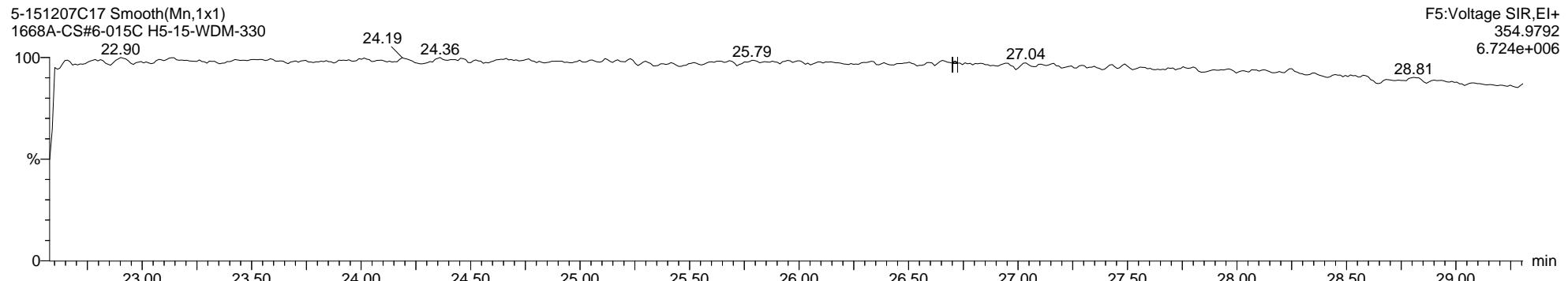
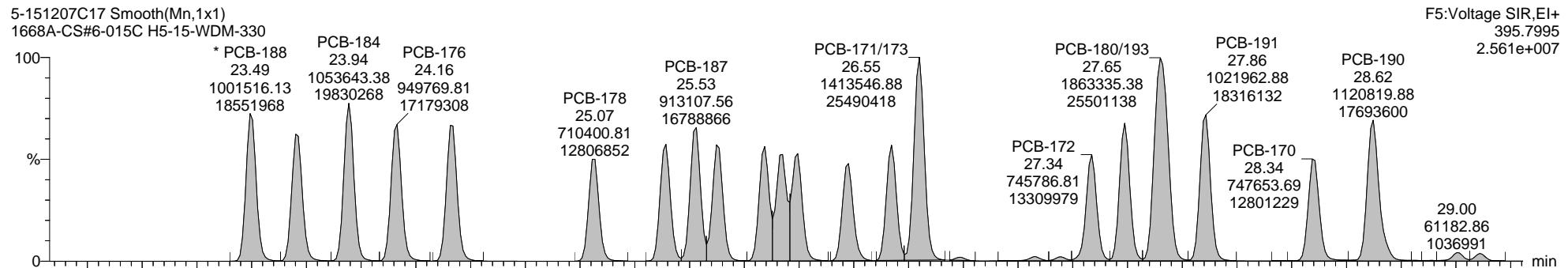
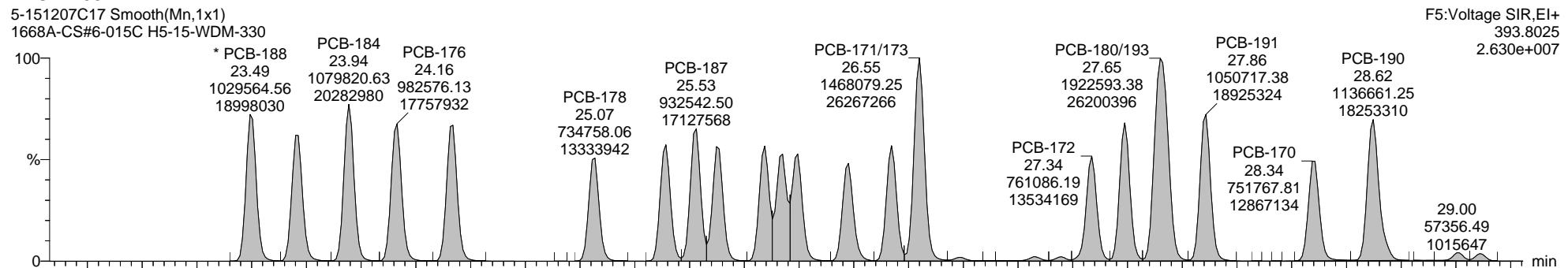
**Name: 5-151207C17, Date: 08-Dec-2015, Time: 01:44:40, ID: H5-15-WDM-330, Description: 1668A-CS#6-015C, Vial: Tray1:1****13C-PCB-167**5-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-3305-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-3305-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-330

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C17, Date: 08-Dec-2015, Time: 01:44:40, ID: H5-15-WDM-330, Description: 1668A-CS#6-015C, Vial: Tray1:1

**\* PCB-188**

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C17, Date: 08-Dec-2015, Time: 01:44:40, ID: H5-15-WDM-330, Description: 1668A-CS#6-015C, Vial: Tray1:1

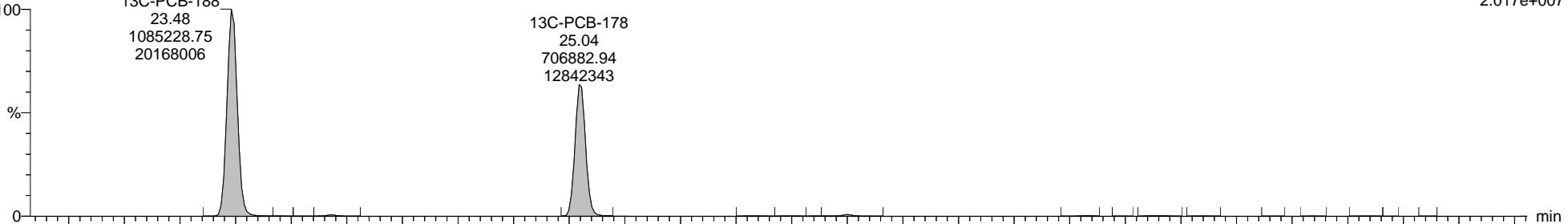
### 13C-PCB-188

5-151207C17 Smooth(Mn,1x1)

1668A-CS#6-015C H5-15-WDM-330

13C-PCB-188

23.48  
1085228.75  
20168006



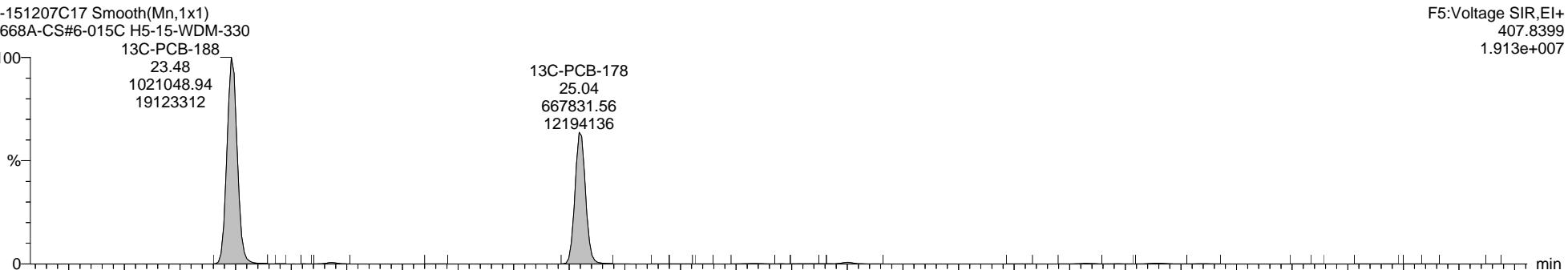
F5:Voltage SIR,EI+  
405.8428  
2.017e+007

5-151207C17 Smooth(Mn,1x1)

1668A-CS#6-015C H5-15-WDM-330

13C-PCB-188

23.48  
1021048.94  
19123312



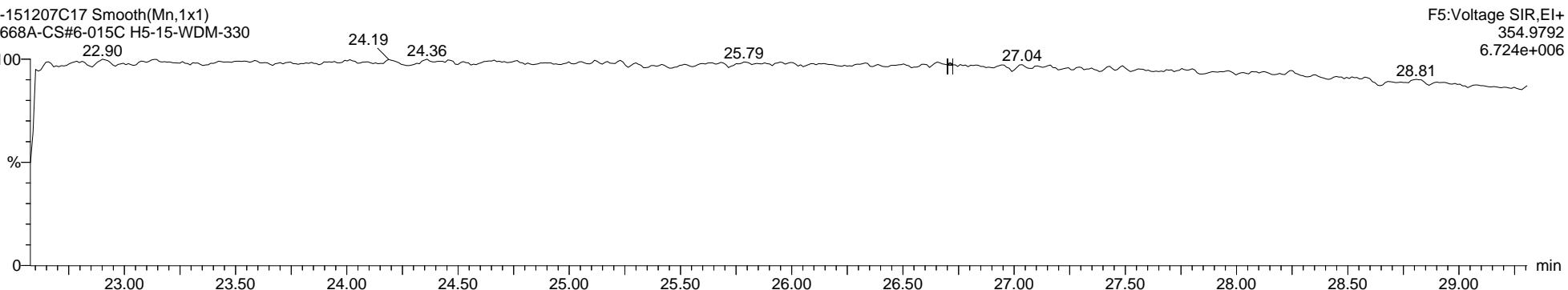
F5:Voltage SIR,EI+  
407.8399  
1.913e+007

5-151207C17 Smooth(Mn,1x1)

1668A-CS#6-015C H5-15-WDM-330

13C-PCB-188

22.90  
24.19  
24.36  
25.79  
27.04  
28.81

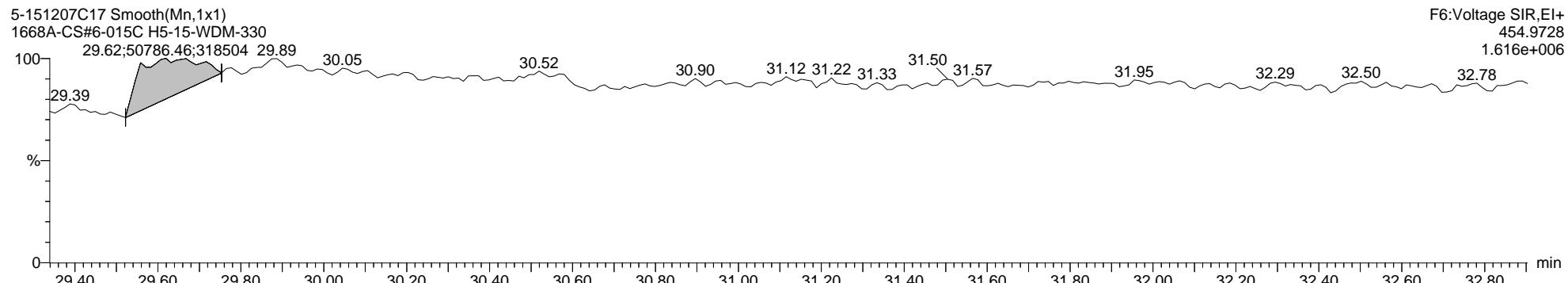
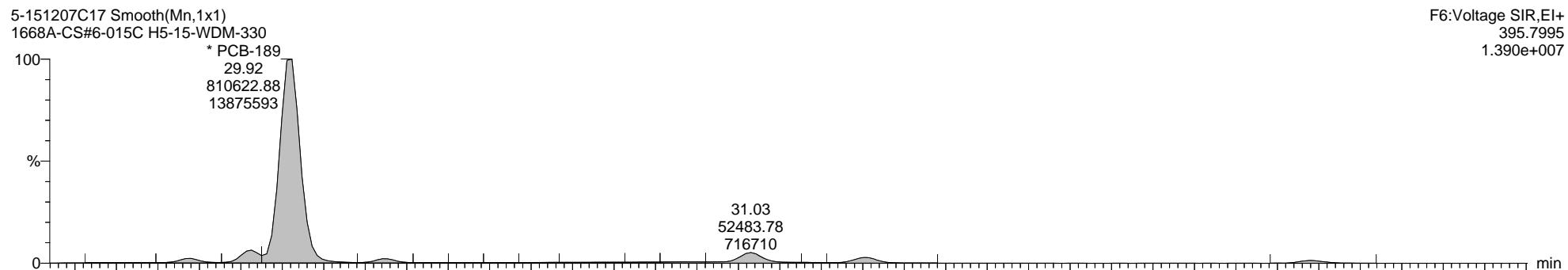
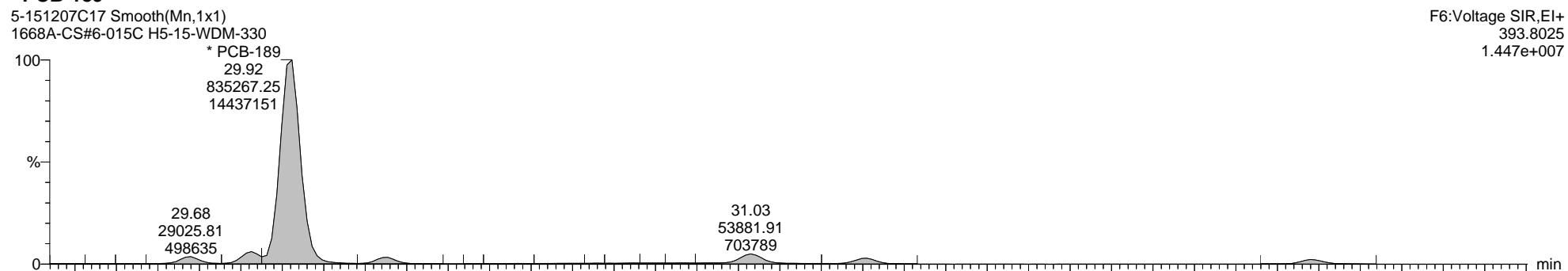


F5:Voltage SIR,EI+  
354.9792  
6.724e+006

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

**Name: 5-151207C17, Date: 08-Dec-2015, Time: 01:44:40, ID: H5-15-WDM-330, Description: 1668A-CS#6-015C, Vial: Tray1:1****\* PCB-189**

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

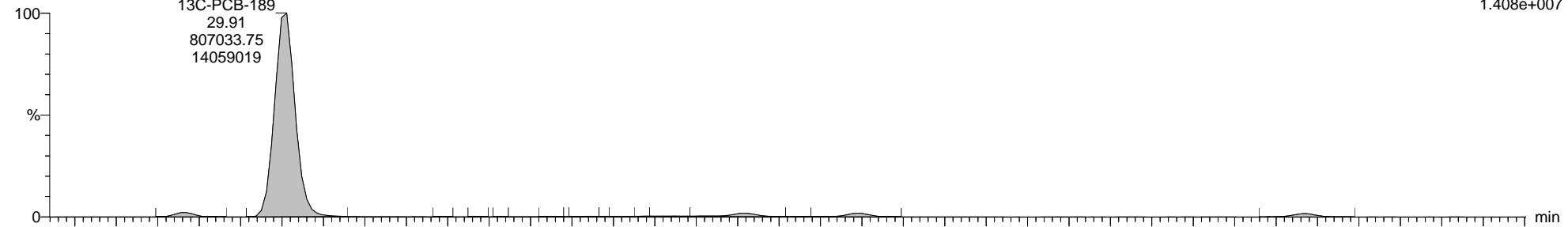
Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

**Name: 5-151207C17, Date: 08-Dec-2015, Time: 01:44:40, ID: H5-15-WDM-330, Description: 1668A-CS#6-015C, Vial: Tray1:1****13C-PCB-189**

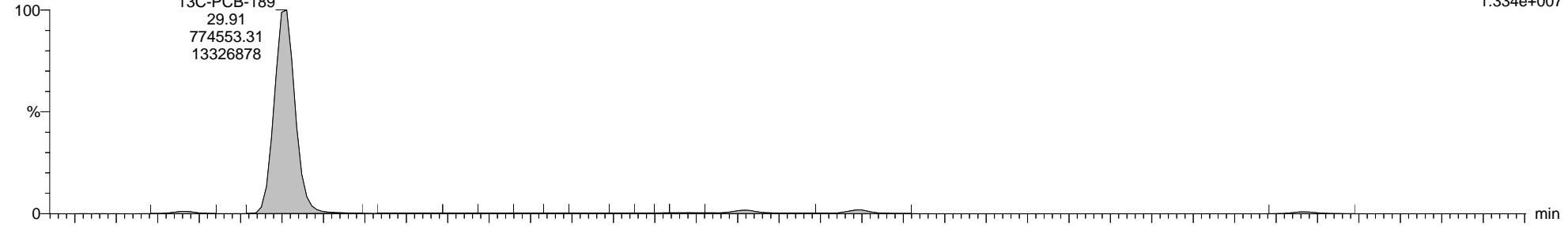
5-151207C17 Smooth(Mn,1x1)

1668A-CS#6-015C H5-15-WDM-330

13C-PCB-189  
29.91  
807033.75  
14059019F6:Voltage SIR,EI+  
405.8428  
1.408e+007

5-151207C17 Smooth(Mn,1x1)

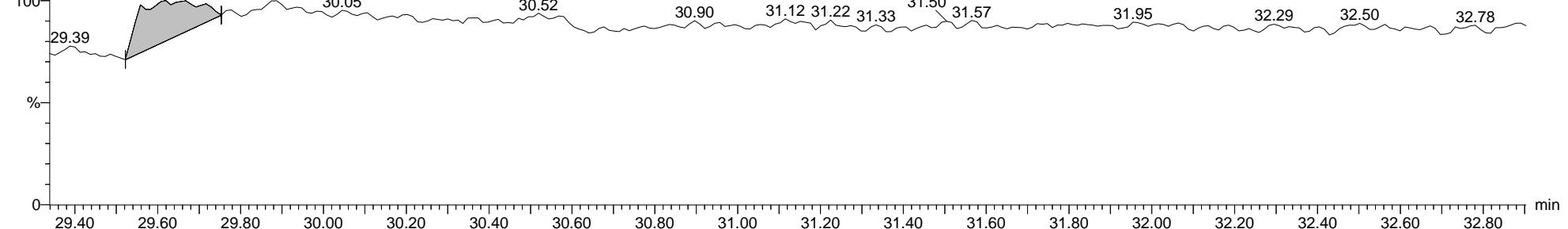
1668A-CS#6-015C H5-15-WDM-330

13C-PCB-189  
29.91  
774553.31  
13326878F6:Voltage SIR,EI+  
407.8399  
1.334e+007

5-151207C17 Smooth(Mn,1x1)

1668A-CS#6-015C H5-15-WDM-330

29.62;50786.46;318504 29.89

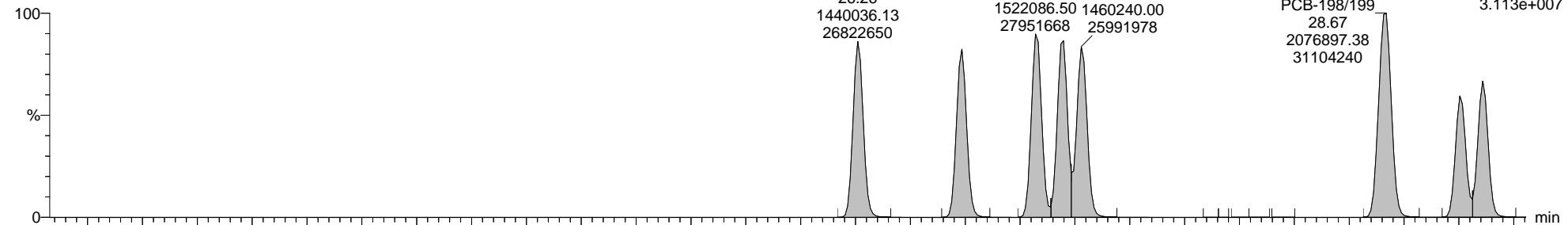
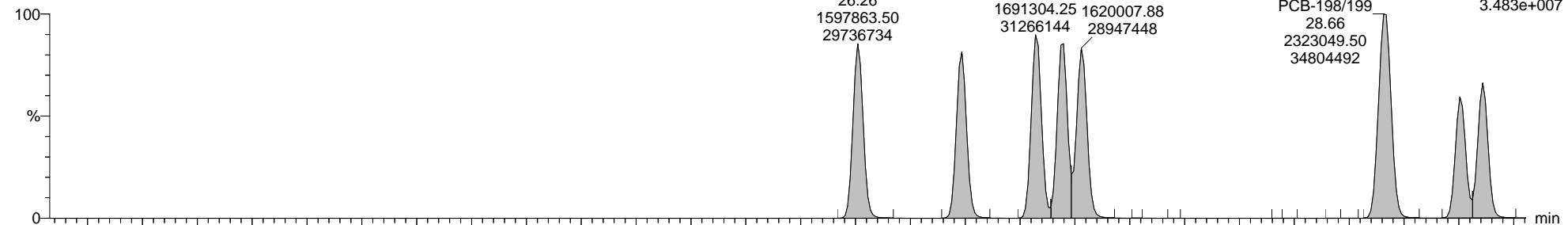
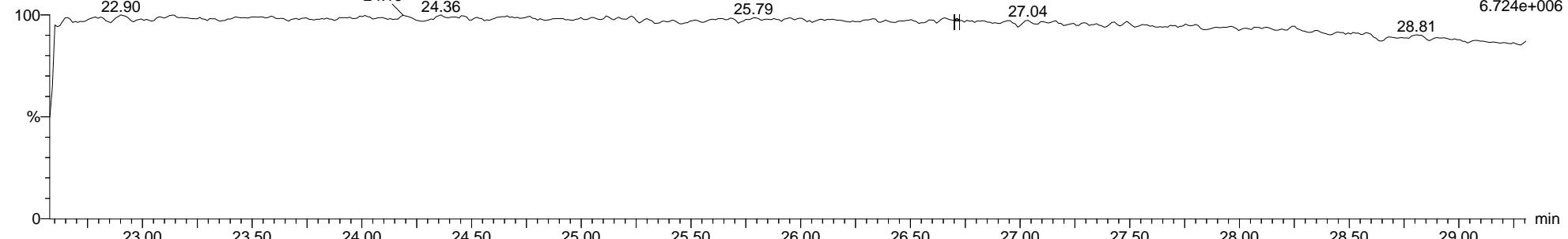
F6:Voltage SIR,EI+  
454.9728  
1.616e+006

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C17, Date: 08-Dec-2015, Time: 01:44:40, ID: H5-15-WDM-330, Description: 1668A-CS#6-015C, Vial: Tray1:1

**\* PCB-202**5-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-3305-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-3305-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-330

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

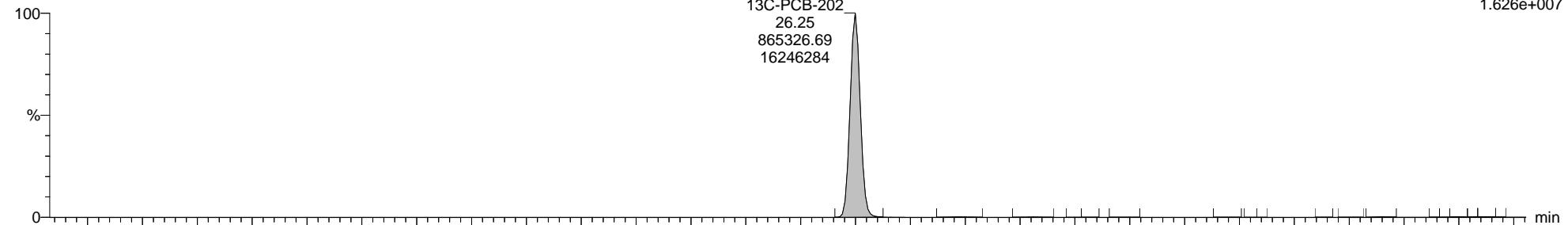
Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C17, Date: 08-Dec-2015, Time: 01:44:40, ID: H5-15-WDM-330, Description: 1668A-CS#6-015C, Vial: Tray1:1

### 13C-PCB-202

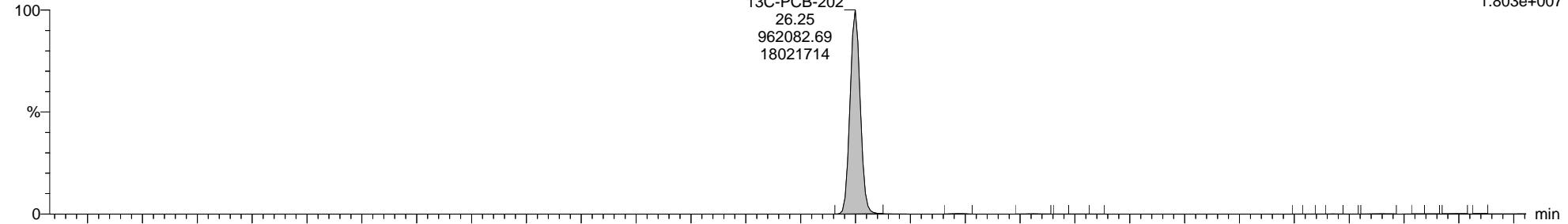
5-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-330

F5:Voltage SIR,EI+  
439.8038  
1.626e+007



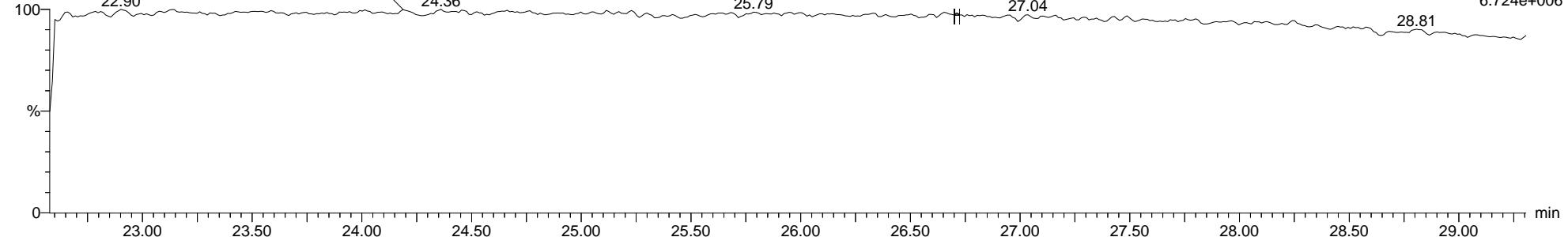
5-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-330

F5:Voltage SIR,EI+  
441.8008  
1.803e+007



5-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-330

F5:Voltage SIR,EI+  
354.9792  
6.724e+006

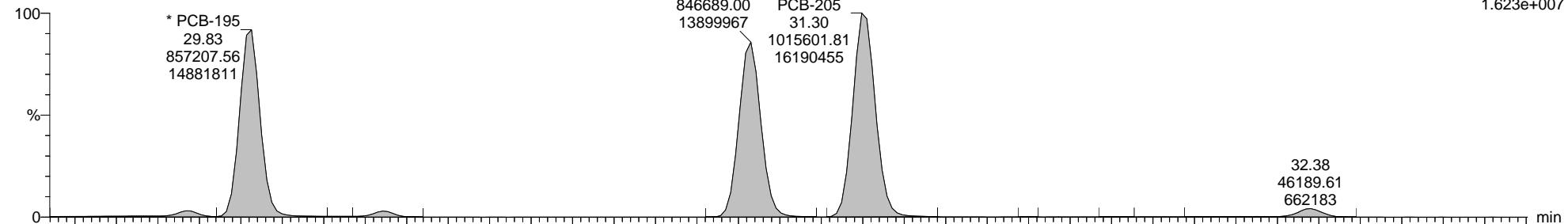
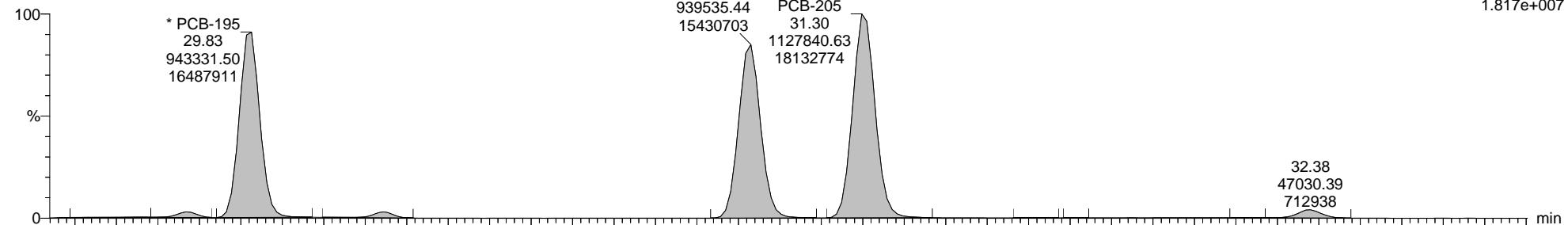
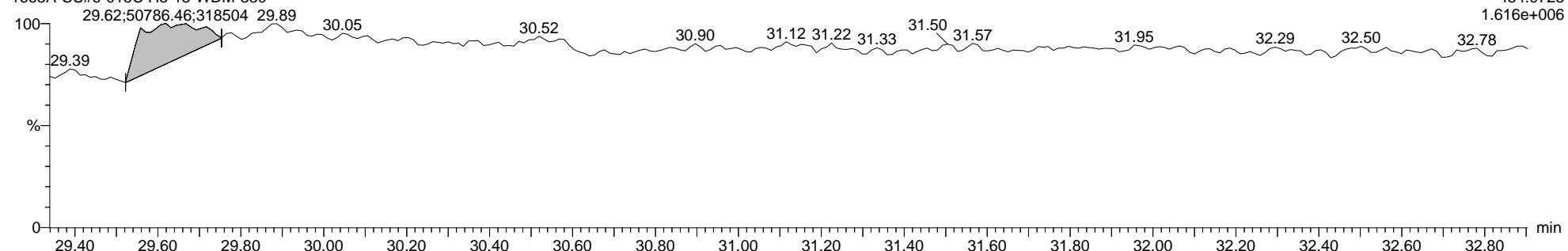


Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

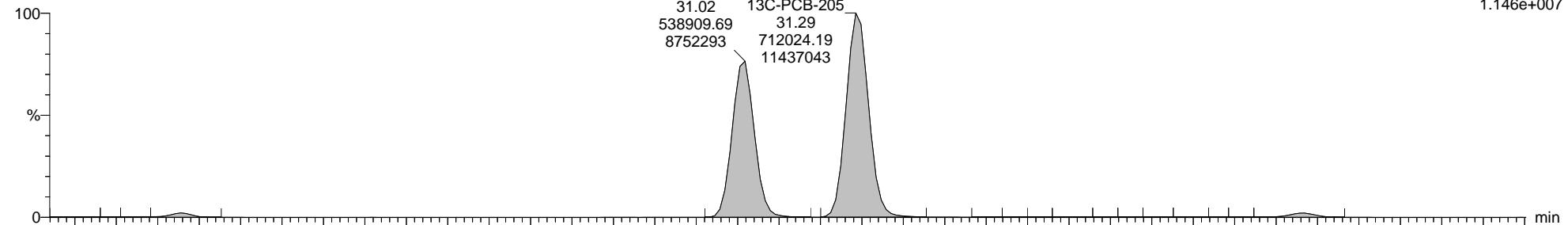
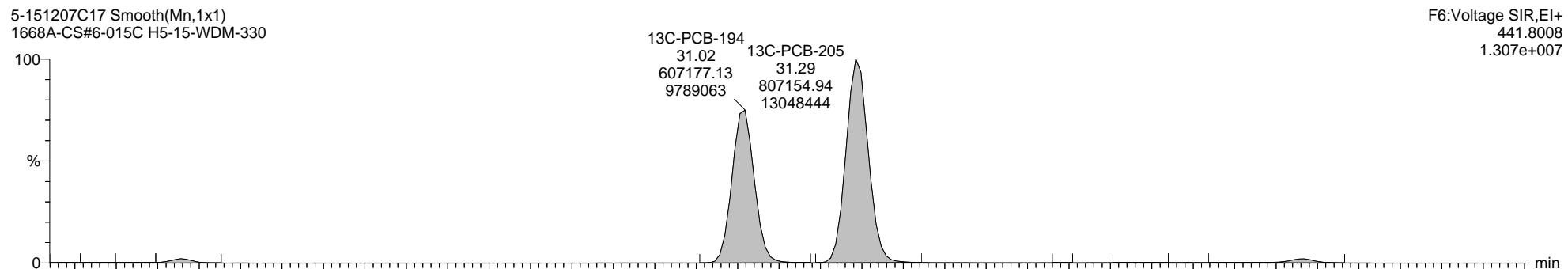
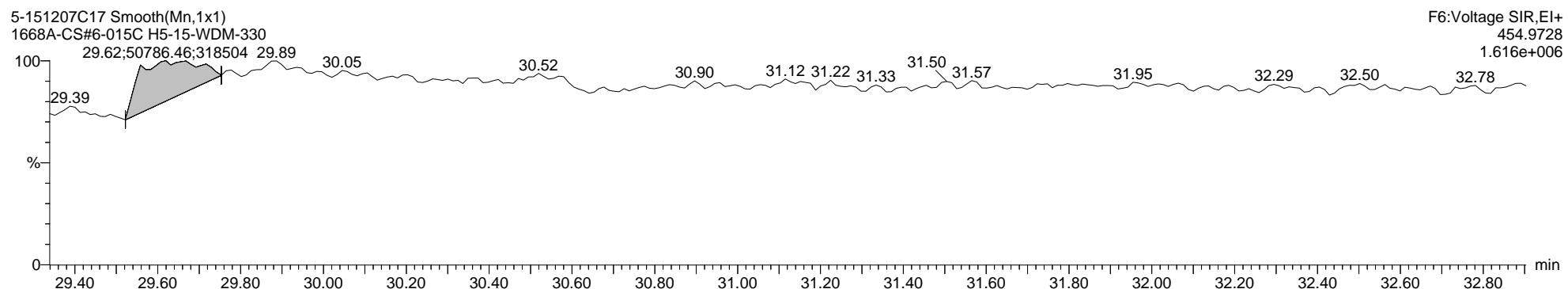
Name: 5-151207C17, Date: 08-Dec-2015, Time: 01:44:40, ID: H5-15-WDM-330, Description: 1668A-CS#6-015C, Vial: Tray1:1

**\* PCB-195**5-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-3305-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-3305-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-330

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

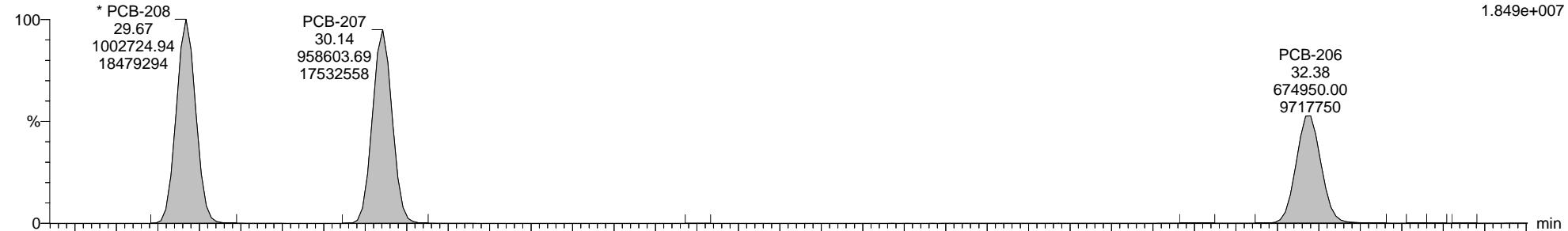
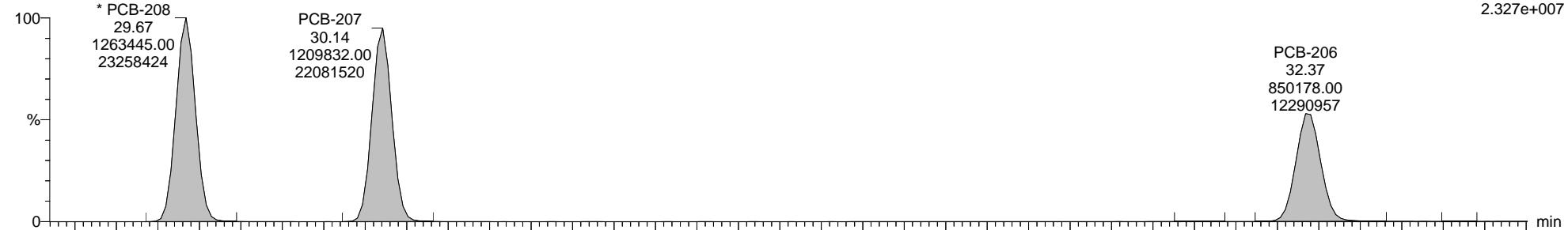
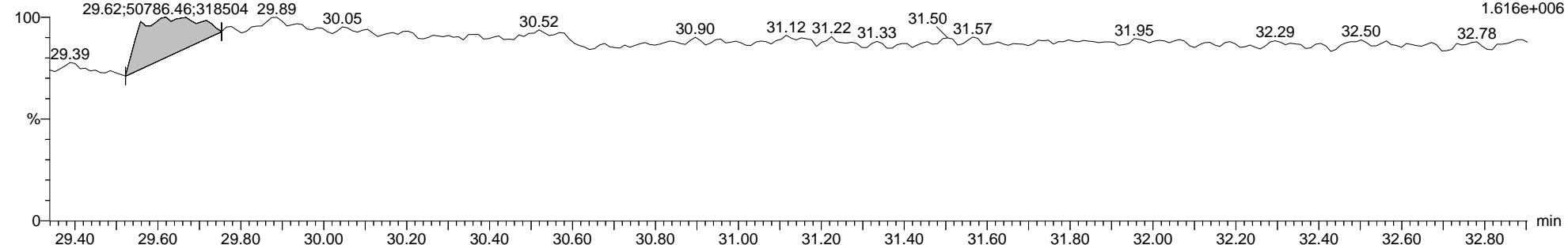
**Name: 5-151207C17, Date: 08-Dec-2015, Time: 01:44:40, ID: H5-15-WDM-330, Description: 1668A-CS#6-015C, Vial: Tray1:1****13C-PCB-205**5-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-3305-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-3305-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-330  
29.62;50786.46;3118504 29.89

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

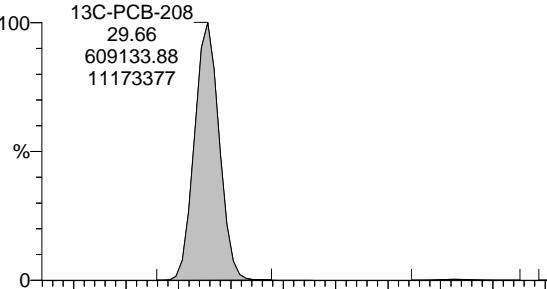
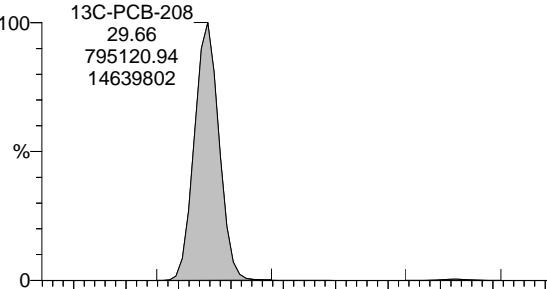
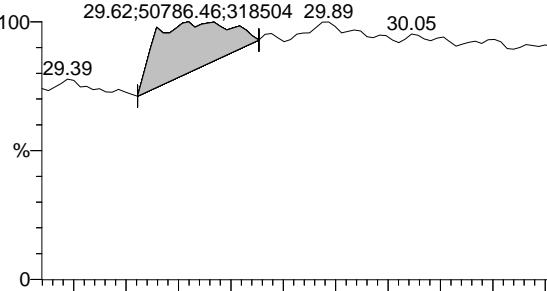
Name: 5-151207C17, Date: 08-Dec-2015, Time: 01:44:40, ID: H5-15-WDM-330, Description: 1668A-CS#6-015C, Vial: Tray1:1

**\* PCB-208**5-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-3305-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-3305-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-330

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

**Name: 5-151207C17, Date: 08-Dec-2015, Time: 01:44:40, ID: H5-15-WDM-330, Description: 1668A-CS#6-015C, Vial: Tray1:1****13C-PCB-208**5-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-330F6:Voltage SIR,EI+  
473.7648  
1.118e+00713C-PCB-206  
32.36  
431917.44  
6444731F6:Voltage SIR,EI+  
473.7648  
1.118e+0075-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-330F6:Voltage SIR,EI+  
475.7619  
1.465e+00713C-PCB-206  
32.36  
551421.75  
8250113F6:Voltage SIR,EI+  
475.7619  
1.465e+0075-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-330F6:Voltage SIR,EI+  
454.9728  
1.616e+006

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

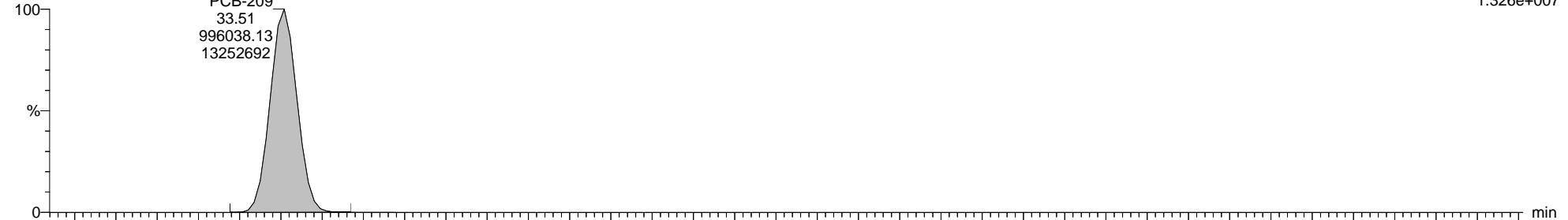
Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

**Name: 5-151207C17, Date: 08-Dec-2015, Time: 01:44:40, ID: H5-15-WDM-330, Description: 1668A-CS#6-015C, Vial: Tray1:1****\* PCB-209**

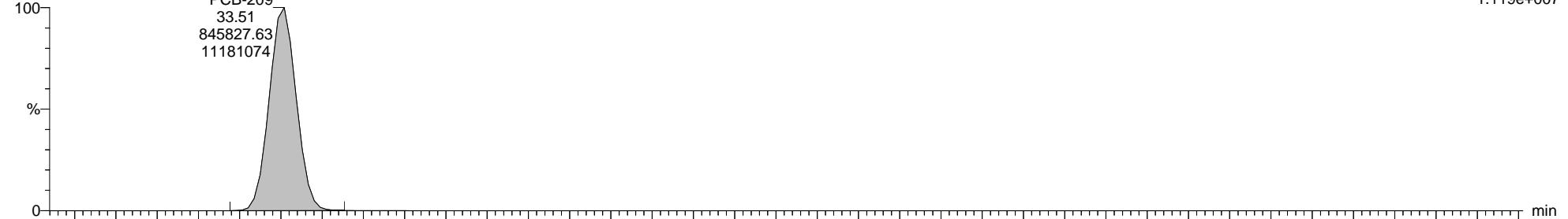
5-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-330  
\* PCB-209  
33.51  
996038.13  
13252692

F7:Voltage SIR,EI+  
497.6826  
1.326e+007



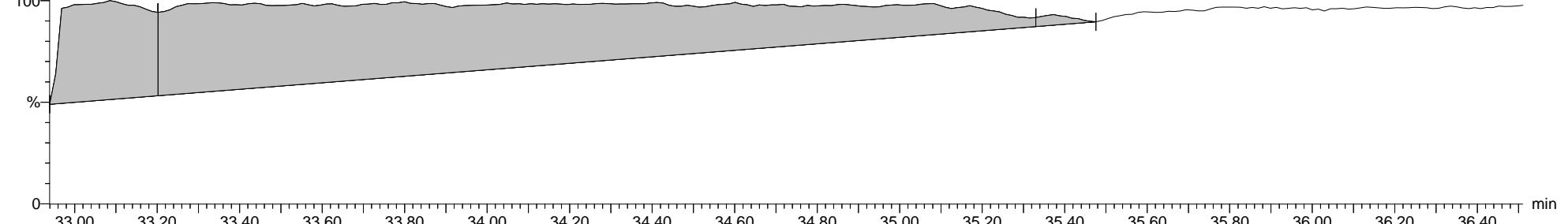
5-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-330  
\* PCB-209  
33.51  
845827.63  
11181074

F7:Voltage SIR,EI+  
499.6797  
1.119e+007



5-151207C17 Smooth(Mn,1x1)  
1668A-CS#6-015C H5-15-WDM-330  
33.80  
1038894.25  
654008

F7:Voltage SIR,EI+  
516.9697  
1.786e+006



Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

**Name: 5-151207C17, Date: 08-Dec-2015, Time: 01:44:40, ID: H5-15-WDM-330, Description: 1668A-CS#6-015C, Vial: Tray1:1****13C-PCB-209**

5-151207C17 Smooth(Mn,1x1)

1668A-CS#6-015C H5-15-WDM-330

13C-PCB-209

100

%

0

33.48

663122.13

8688659

33.48

663122.13

8688659

F7:Voltage SIR,EI+

509.7229

8.693e+006

min

5-151207C17 Smooth(Mn,1x1)

1668A-CS#6-015C H5-15-WDM-330

13C-PCB-209

100

%

0

33.48

564288.63

7463649

F7:Voltage SIR,EI+

511.7199

7.467e+006

min

5-151207C17 Smooth(Mn,1x1)

1668A-CS#6-015C H5-15-WDM-330

33.80

1038894.25

654008

100

%

0

33.00 33.20 33.40 33.60 33.80 34.00 34.20 34.40 34.60 34.80 35.00 35.20 35.40 35.60 35.80 36.00 36.20 36.40 min

F7:Voltage SIR,EI+

516.9697

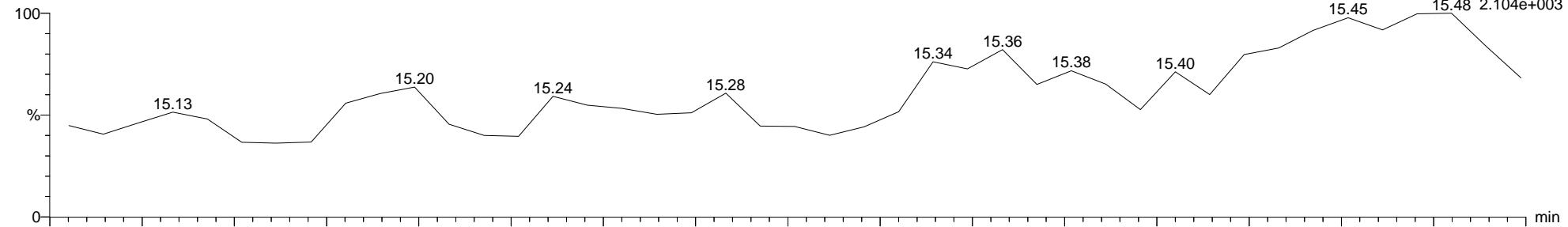
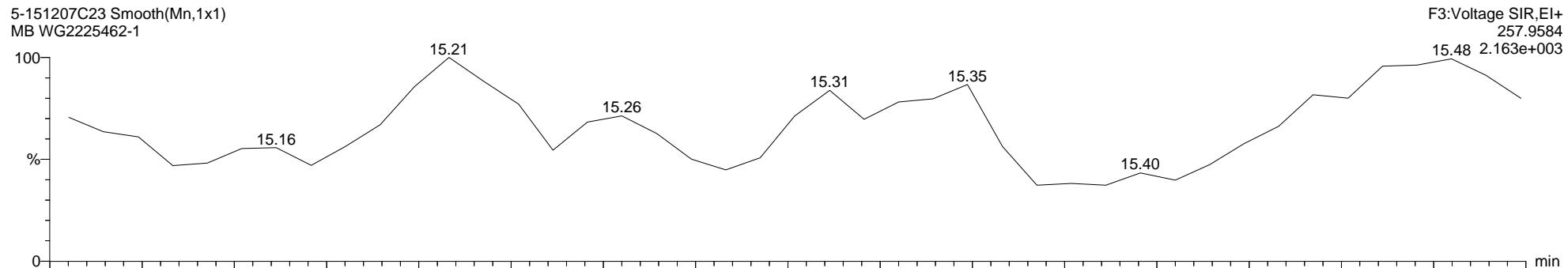
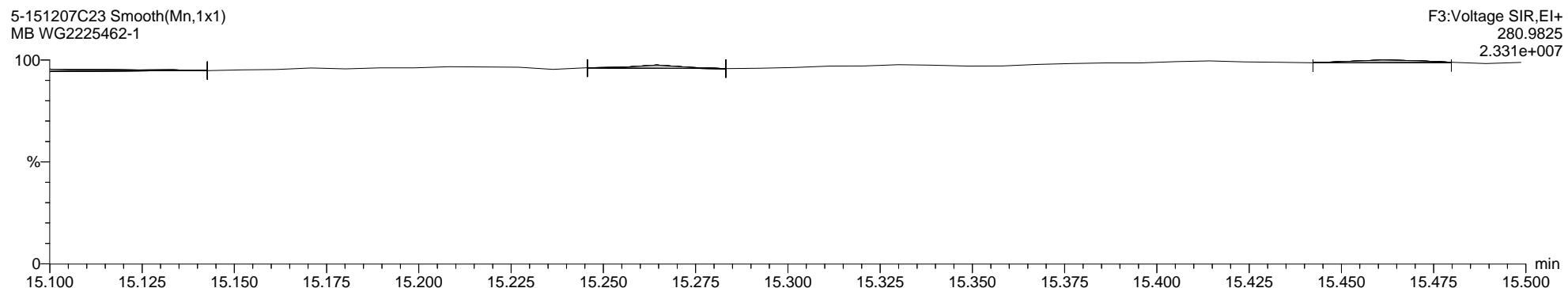
1.786e+006

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C23, Date: 08-Dec-2015, Time: 05:40:13, ID: WG2225462-1, Description: MB, Vial: Tray1:18

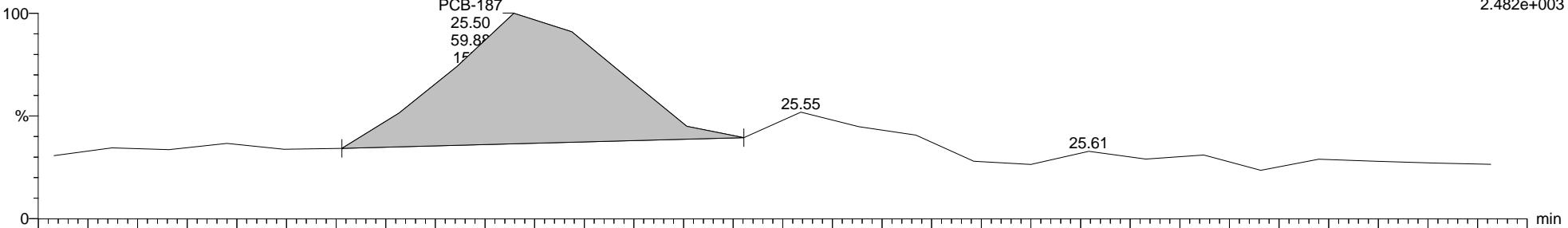
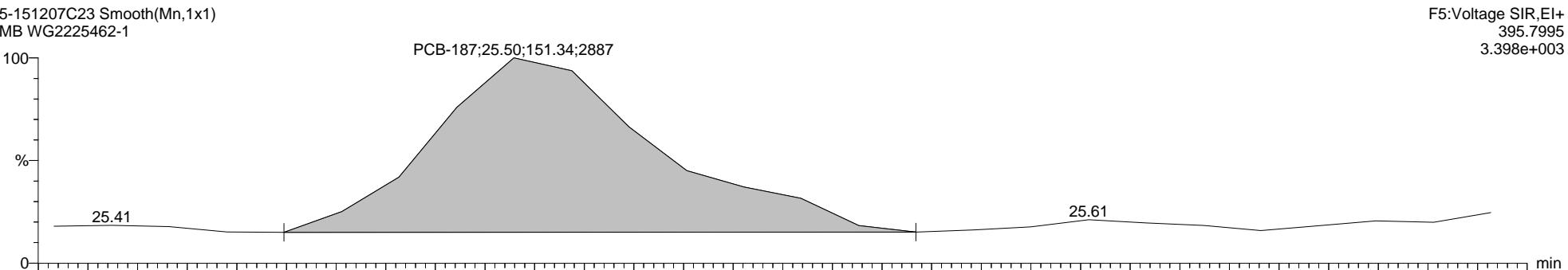
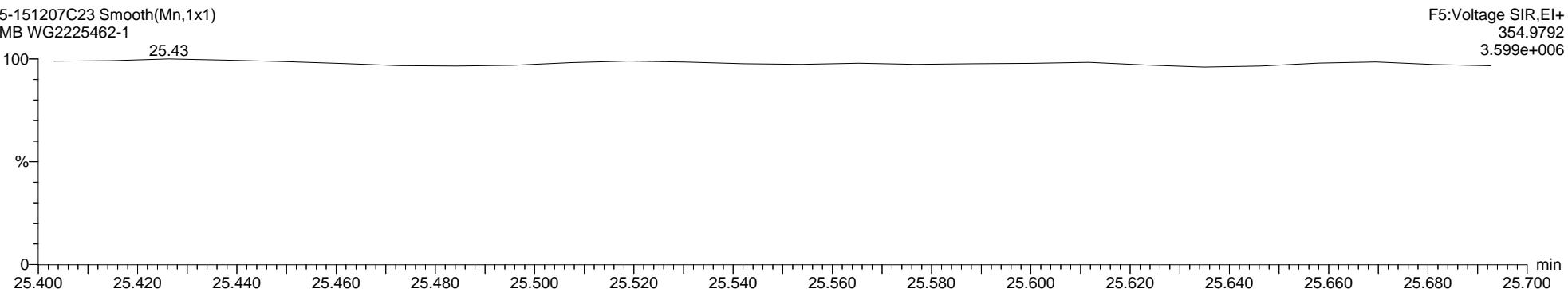
**\* PCB-34**5-151207C23 Smooth(Mn,1x1)  
MB WG2225462-15-151207C23 Smooth(Mn,1x1)  
MB WG2225462-15-151207C23 Smooth(Mn,1x1)  
MB WG2225462-1

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C23, Date: 08-Dec-2015, Time: 05:40:13, ID: WG2225462-1, Description: MB, Vial: Tray1:18

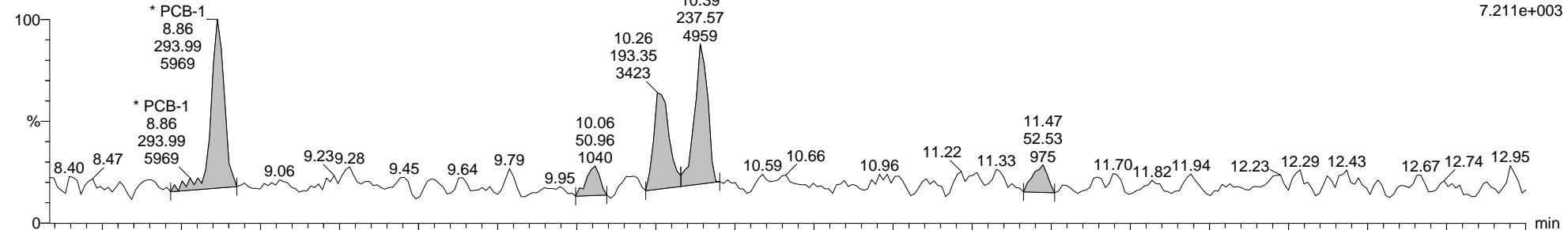
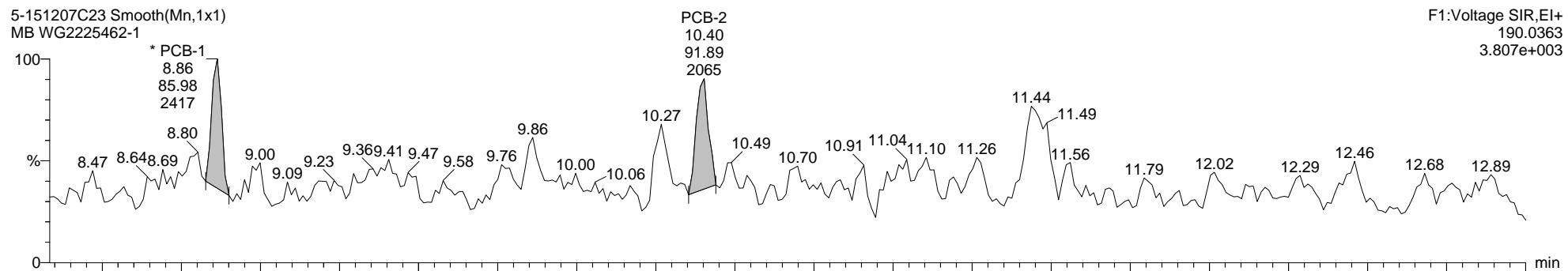
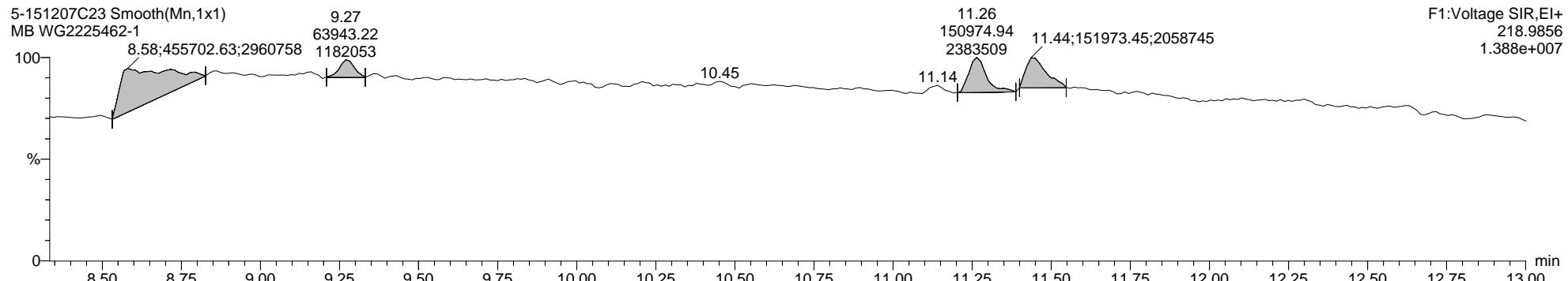
**PCB-187**5-151207C23 Smooth(Mn,1x1)  
MB WG2225462-15-151207C23 Smooth(Mn,1x1)  
MB WG2225462-15-151207C23 Smooth(Mn,1x1)  
MB WG2225462-1

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C23, Date: 08-Dec-2015, Time: 05:40:13, ID: WG2225462-1, Description: MB, Vial: Tray1:18

**\* PCB-1**5-151207C23 Smooth(Mn,1x1)  
MB WG2225462-15-151207C23 Smooth(Mn,1x1)  
MB WG2225462-15-151207C23 Smooth(Mn,1x1)  
MB WG2225462-1

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C23, Date: 08-Dec-2015, Time: 05:40:13, ID: WG2225462-1, Description: MB, Vial: Tray1:18

**13C-PCB-1**

5-151207C23 Smooth(Mn,1x1)

MB WG2225462-1

13C-PCB-1  
8.86  
444635.19  
946531713C-PCB-3  
10.39  
396686.88  
7347637F1:Voltage SIR,EI+  
200.0795  
9.467e+006

%

100  
0

min

5-151207C23 Smooth(Mn,1x1)

MB WG2225462-1

13C-PCB-1  
8.85  
135478.88  
299386113C-PCB-3  
10.39  
123002.31  
2300638F1:Voltage SIR,EI+  
202.0766  
3.070e+006

%

100  
0

min

5-151207C23 Smooth(Mn,1x1)

MB WG2225462-1

8.58;455702.63;2960758  
9.27  
63943.22  
1182053

10.45

11.26  
150974.94  
2383509  
11.44;151973.45;2058745F1:Voltage SIR,EI+  
218.9856  
1.388e+007

%

100  
0

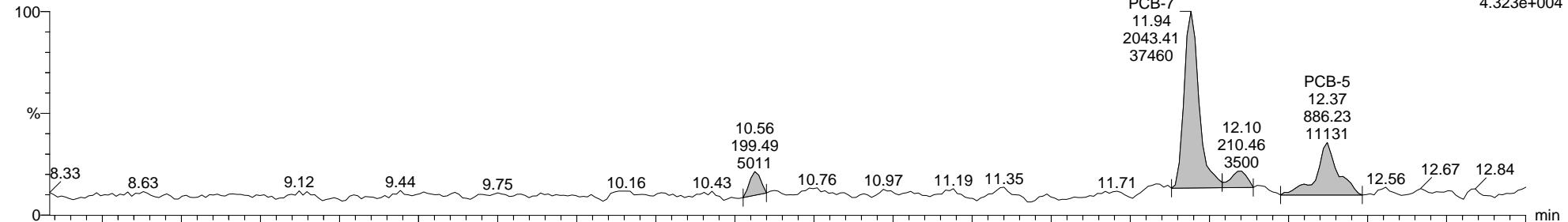
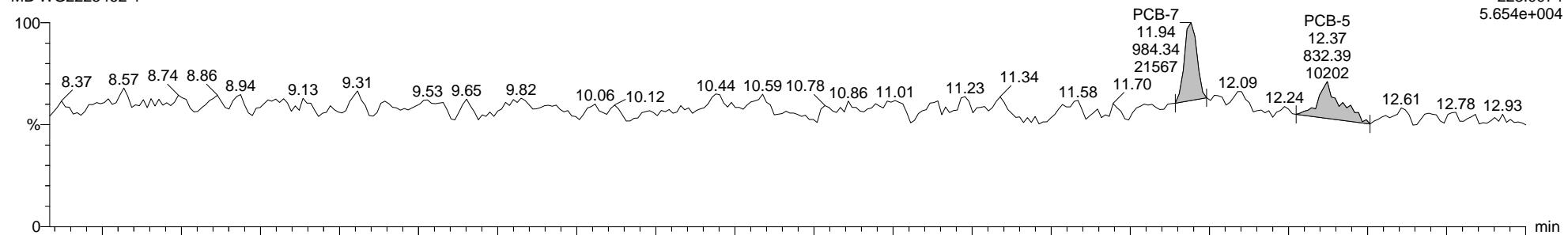
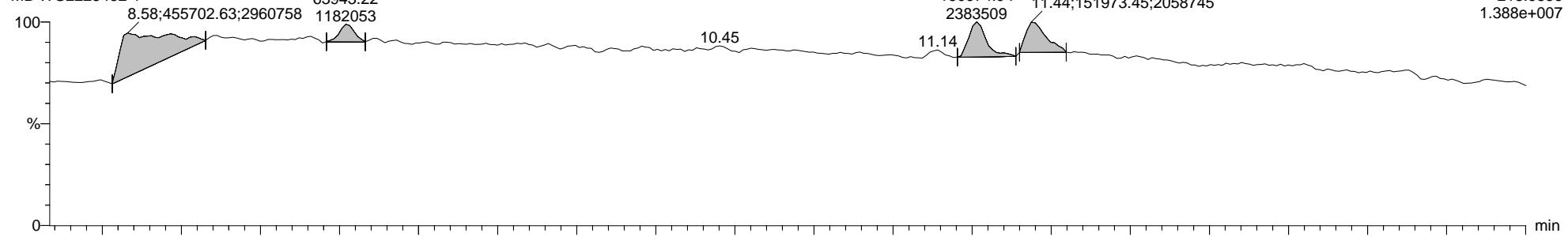
min

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C23, Date: 08-Dec-2015, Time: 05:40:13, ID: WG2225462-1, Description: MB, Vial: Tray1:18

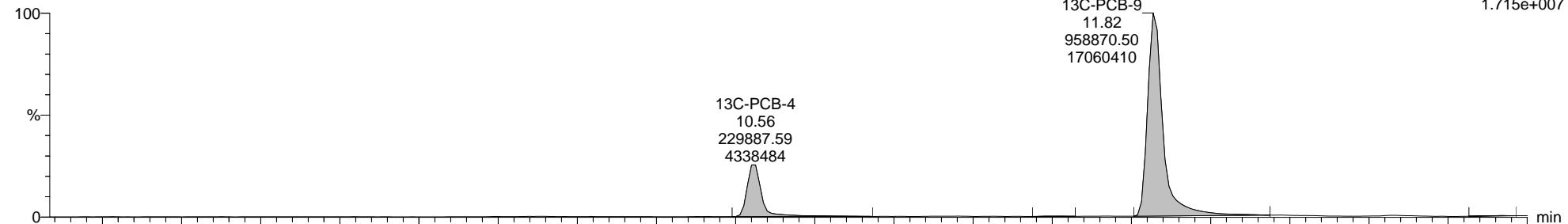
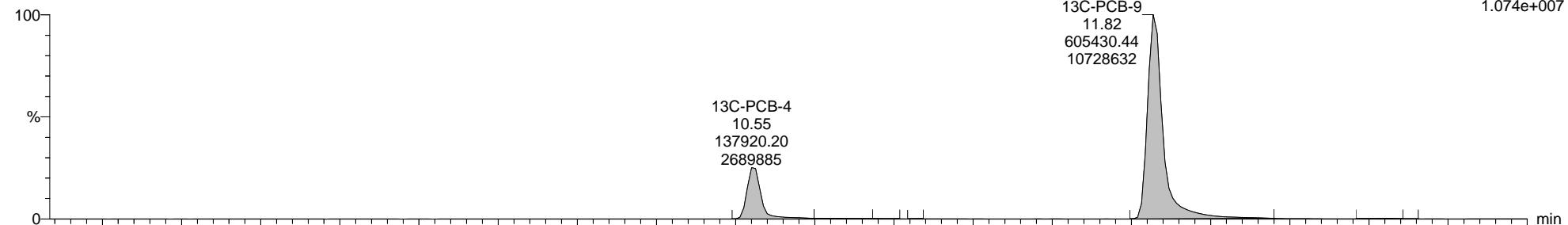
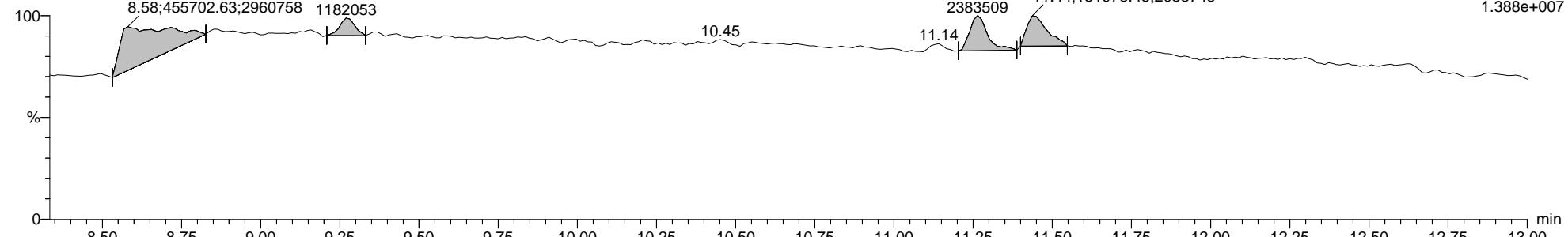
**\* PCB-4**5-151207C23 Smooth(Mn,1x1)  
MB WG2225462-15-151207C23 Smooth(Mn,1x1)  
MB WG2225462-15-151207C23 Smooth(Mn,1x1)  
MB WG2225462-1

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C23, Date: 08-Dec-2015, Time: 05:40:13, ID: WG2225462-1, Description: MB, Vial: Tray1:18

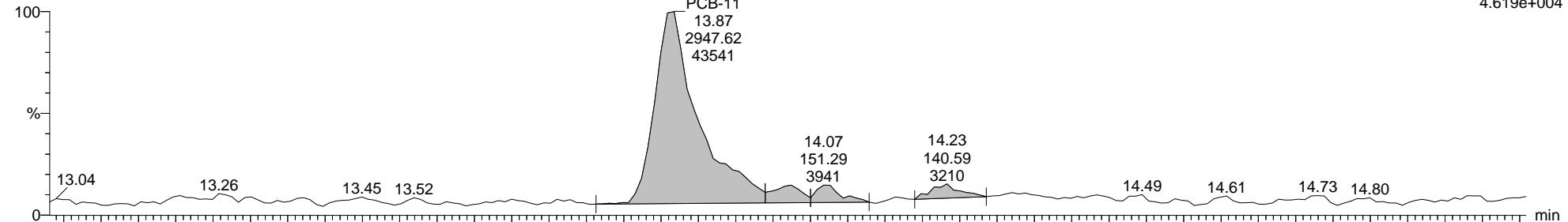
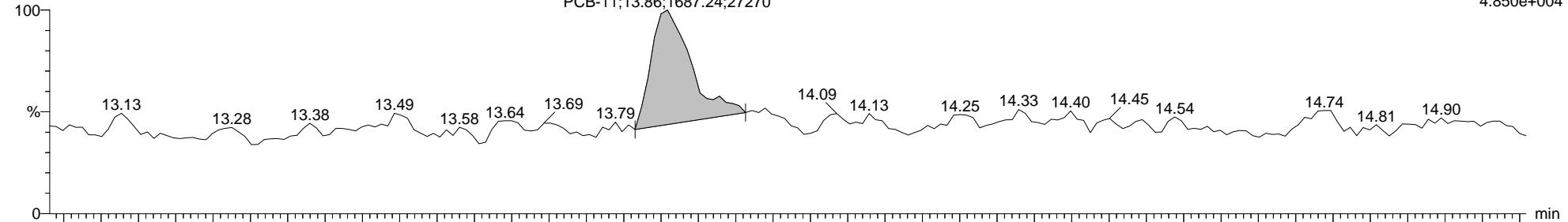
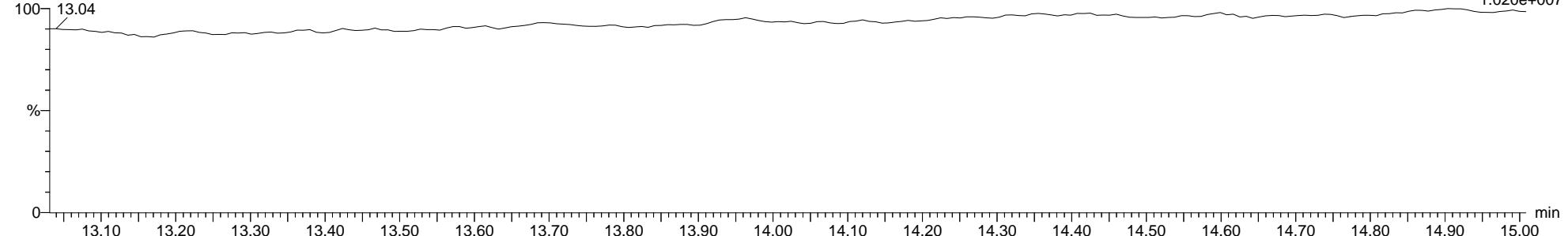
**13C-PCB-4**5-151207C23 Smooth(Mn,1x1)  
MB WG2225462-15-151207C23 Smooth(Mn,1x1)  
MB WG2225462-15-151207C23 Smooth(Mn,1x1)  
MB WG2225462-1

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C23, Date: 08-Dec-2015, Time: 05:40:13, ID: WG2225462-1, Description: MB, Vial: Tray1:18

**PCB-15**5-151207C23 Smooth(Mn,1x1)  
MB WG2225462-1F2:Voltage SIR, EI+  
222.0003  
4.619e+0045-151207C23 Smooth(Mn,1x1)  
MB WG2225462-1F2:Voltage SIR, EI+  
223.9974  
4.850e+0045-151207C23 Smooth(Mn,1x1)  
MB WG2225462-1F2:Voltage SIR, EI+  
242.9856  
1.020e+007

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

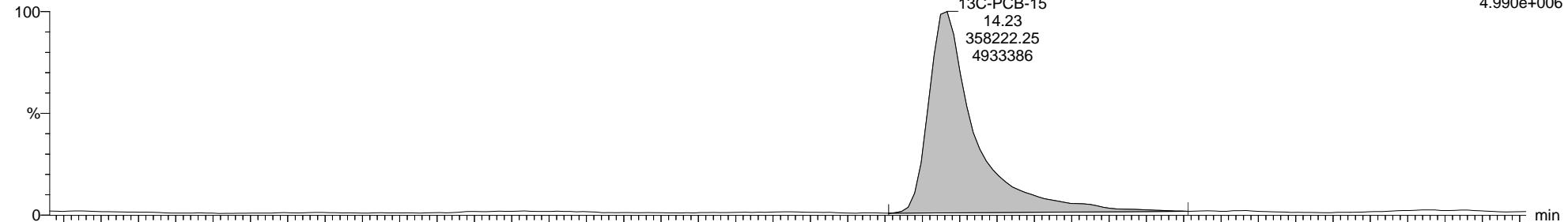
Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

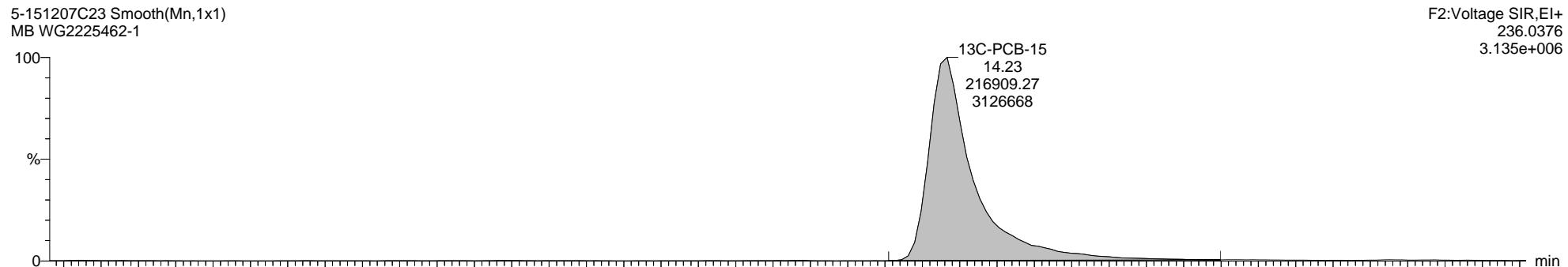
Name: 5-151207C23, Date: 08-Dec-2015, Time: 05:40:13, ID: WG2225462-1, Description: MB, Vial: Tray1:18

### 13C-PCB-15

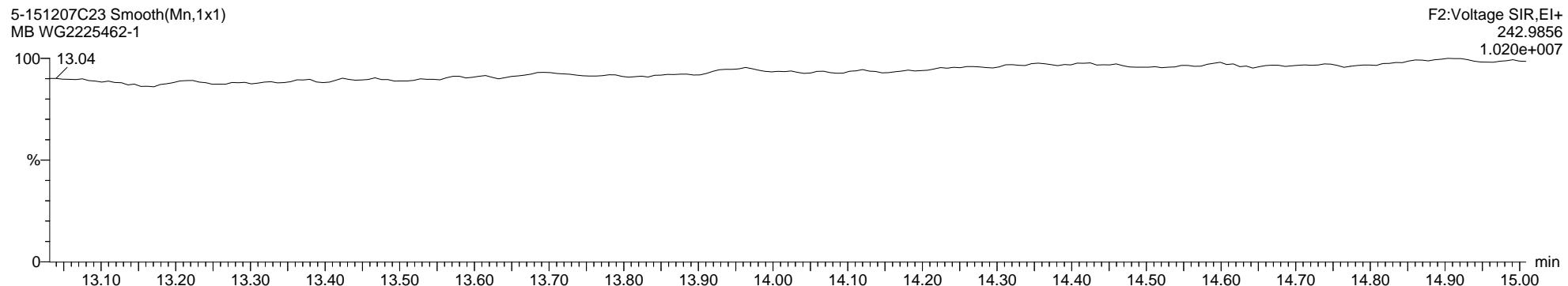
5-151207C23 Smooth(Mn,1x1)  
MB WG2225462-1



5-151207C23 Smooth(Mn,1x1)  
MB WG2225462-1



5-151207C23 Smooth(Mn,1x1)  
MB WG2225462-1



Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

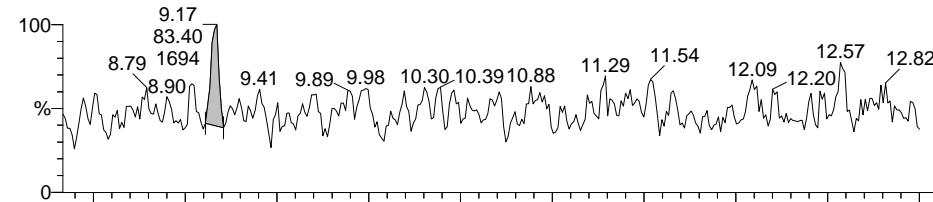
Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C23, Date: 08-Dec-2015, Time: 05:40:13, ID: WG2225462-1, Description: MB, Vial: Tray1:18

**\* PCB-19**

5-151207C23 Smooth(Mn,1x1)

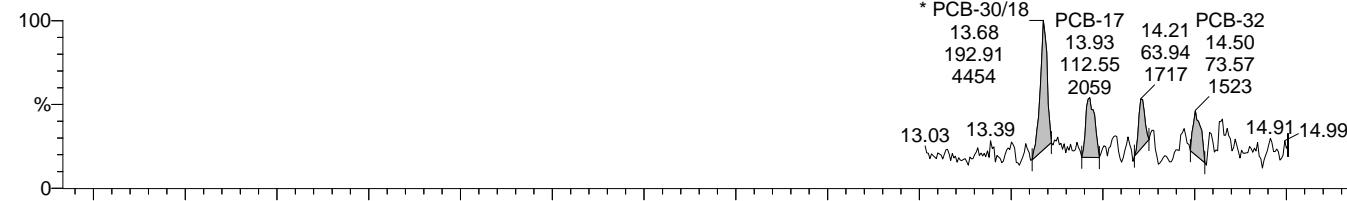
MB WG2225462-1



F1:Voltage SIR, EI+  
255.9613  
2.803e+003

5-151207C23 Smooth(Mn,1x1)

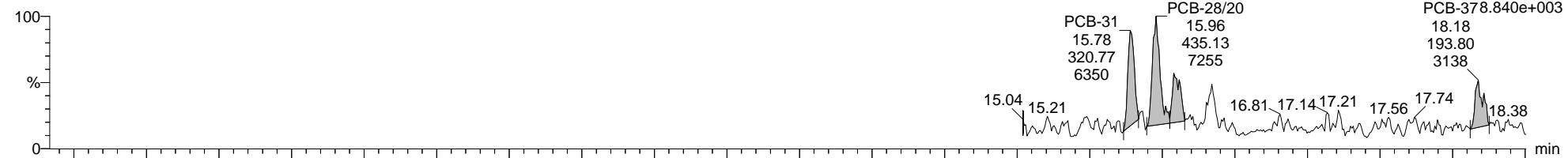
MB WG2225462-1



F2:Voltage SIR, EI+  
257.9584  
5.786e+003

5-151207C23 Smooth(Mn,1x1)

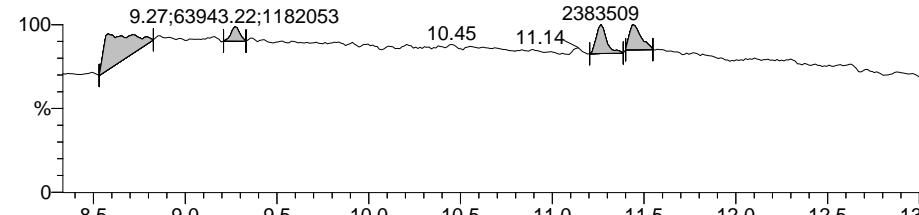
MB WG2225462-1



F3:Voltage SIR, EI+  
257.9584  
PCB-378.840e+003

5-151207C23 Smooth(Mn,1x1)

MB WG2225462-1



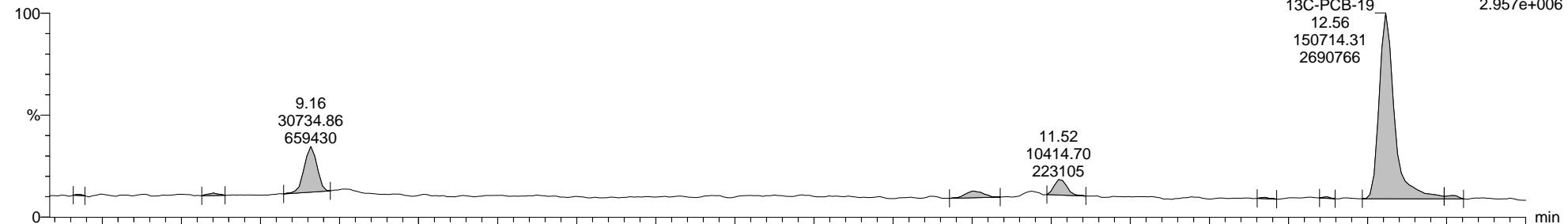
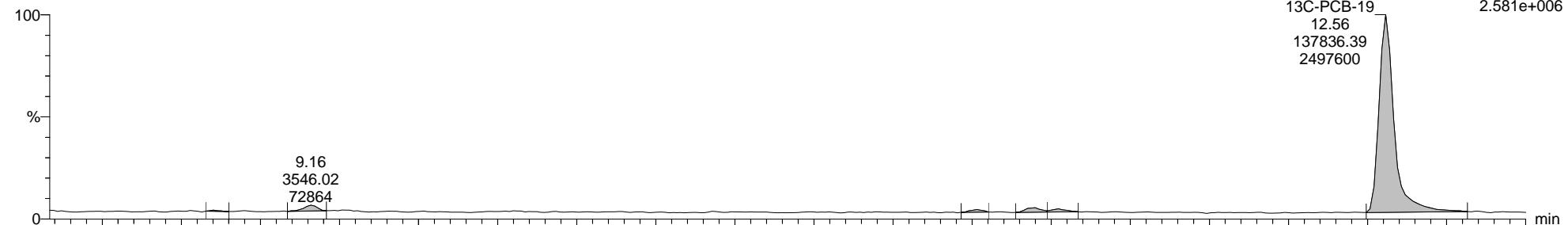
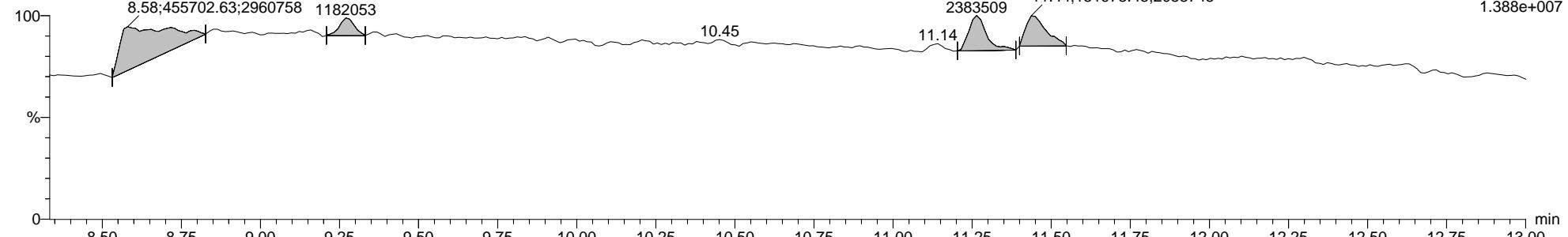
F1:Voltage SIR, EI+  
218.9856  
1.388e+007

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C23, Date: 08-Dec-2015, Time: 05:40:13, ID: WG2225462-1, Description: MB, Vial: Tray1:18

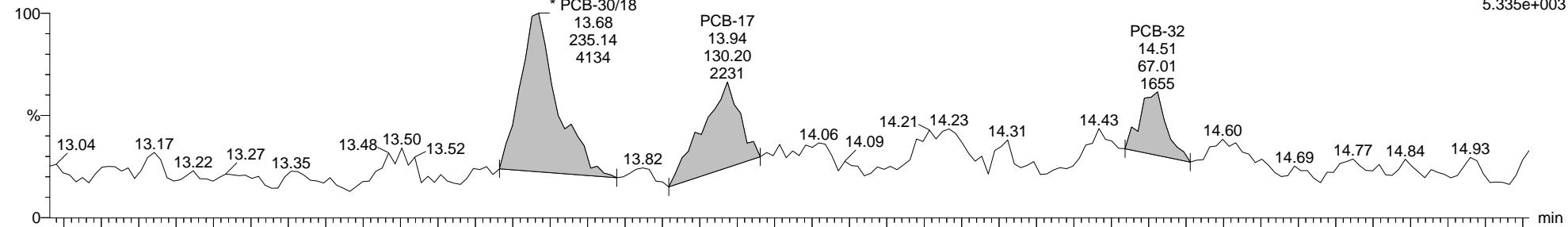
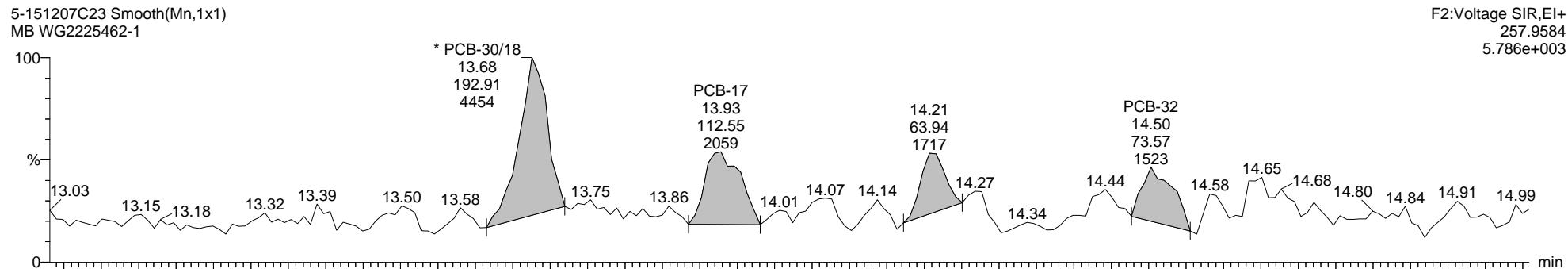
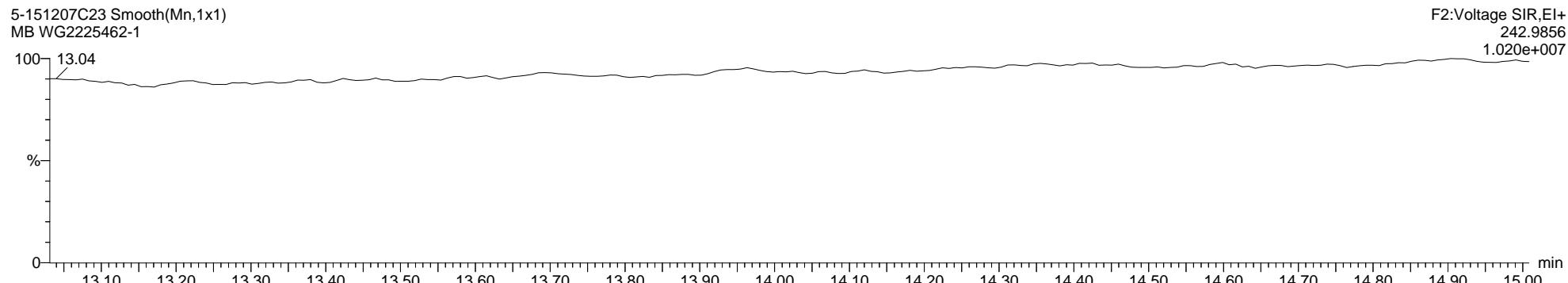
**13C-PCB-19**5-151207C23 Smooth(Mn,1x1)  
MB WG2225462-15-151207C23 Smooth(Mn,1x1)  
MB WG2225462-15-151207C23 Smooth(Mn,1x1)  
MB WG2225462-1

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C23, Date: 08-Dec-2015, Time: 05:40:13, ID: WG2225462-1, Description: MB, Vial: Tray1:18

**\* PCB-30/18**5-151207C23 Smooth(Mn,1x1)  
MB WG2225462-15-151207C23 Smooth(Mn,1x1)  
MB WG2225462-15-151207C23 Smooth(Mn,1x1)  
MB WG2225462-1

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

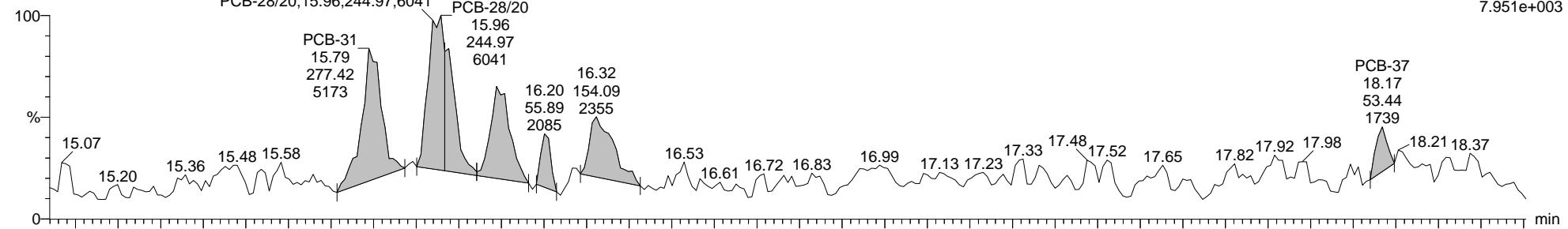
Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C23, Date: 08-Dec-2015, Time: 05:40:13, ID: WG2225462-1, Description: MB, Vial: Tray1:18

**PCB-37**

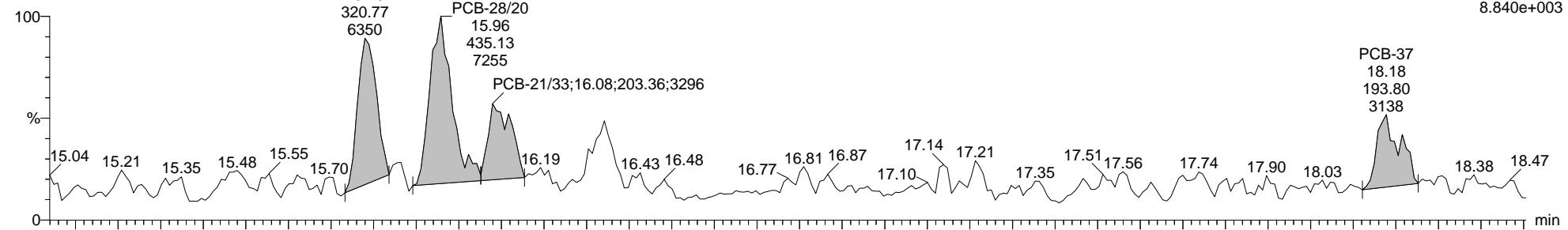
5-151207C23 Smooth(Mn,1x1)

MB WG2225462-1



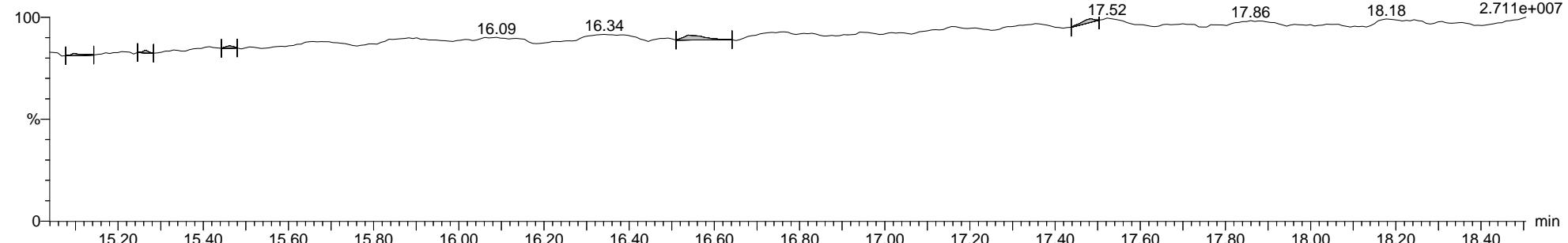
5-151207C23 Smooth(Mn,1x1)

MB WG2225462-1



5-151207C23 Smooth(Mn,1x1)

MB WG2225462-1

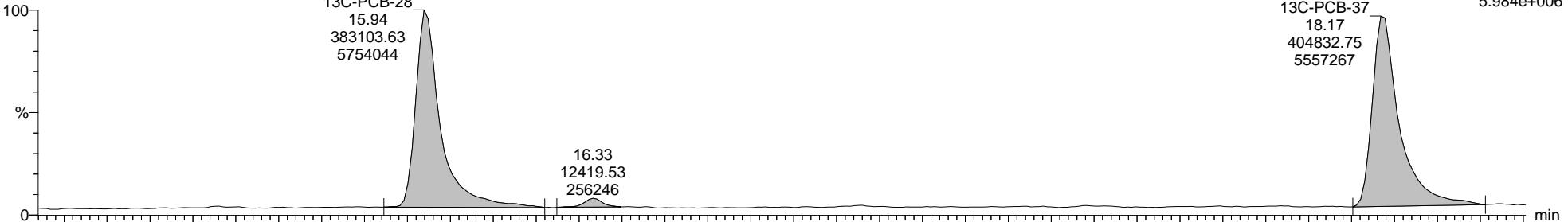
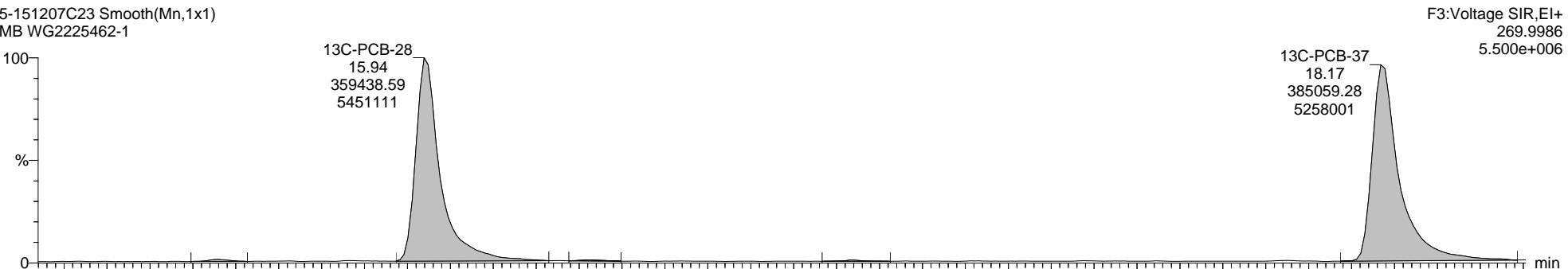
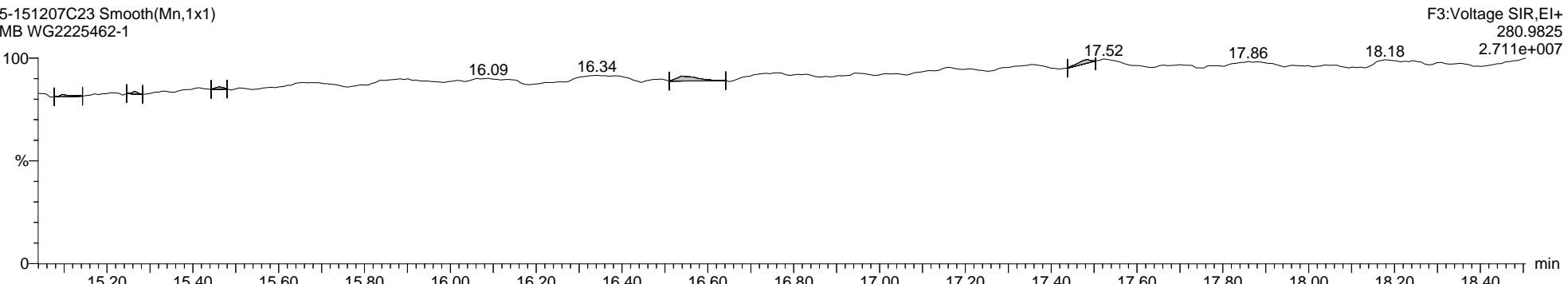


Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C23, Date: 08-Dec-2015, Time: 05:40:13, ID: WG2225462-1, Description: MB, Vial: Tray1:18

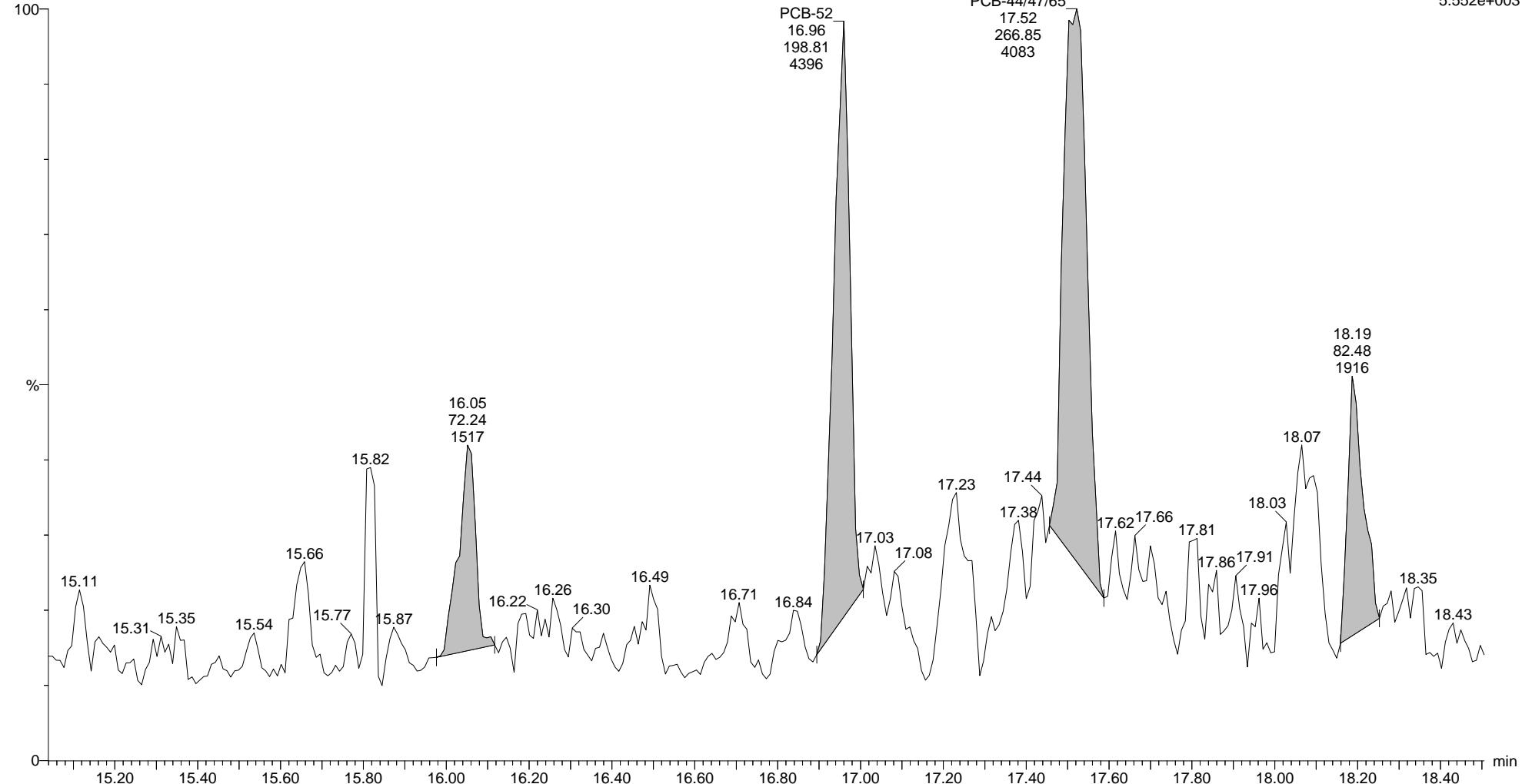
**13C-PCB-37**5-151207C23 Smooth(Mn,1x1)  
MB WG2225462-15-151207C23 Smooth(Mn,1x1)  
MB WG2225462-15-151207C23 Smooth(Mn,1x1)  
MB WG2225462-1

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C23, Date: 08-Dec-2015, Time: 05:40:13, ID: WG2225462-1, Description: MB, Vial: Tray1:18

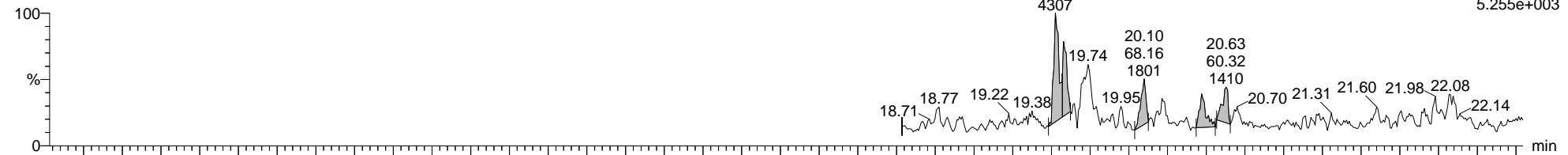
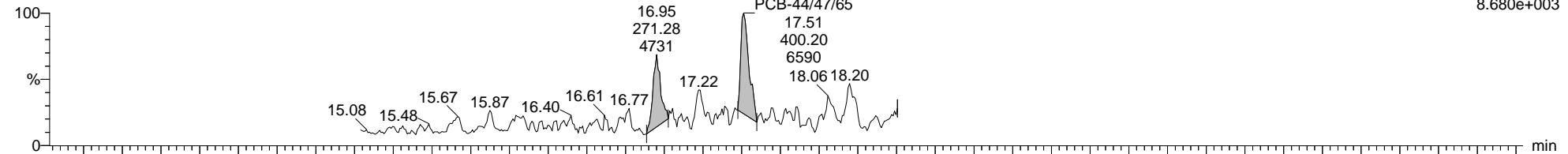
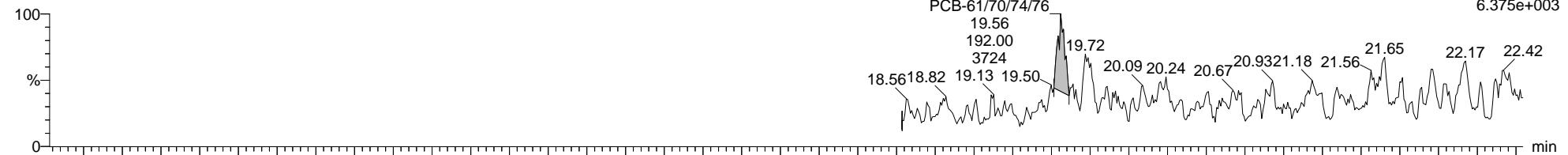
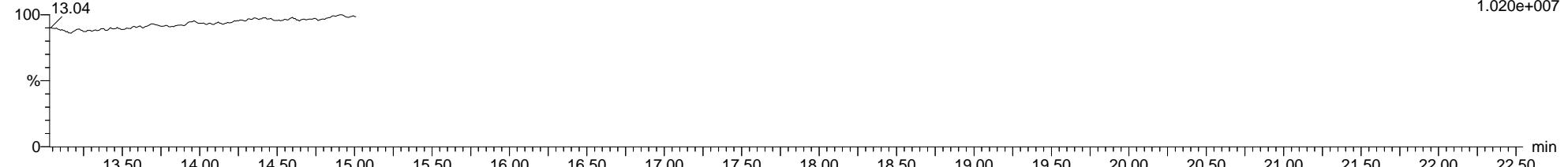
**\* PCB-54**5-151207C23 Smooth(Mn,1x1)  
MB WG2225462-1F3:Voltage SIR,ELI+  
289.9224  
5.552e+003

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C23, Date: 08-Dec-2015, Time: 05:40:13, ID: WG2225462-1, Description: MB, Vial: Tray1:18

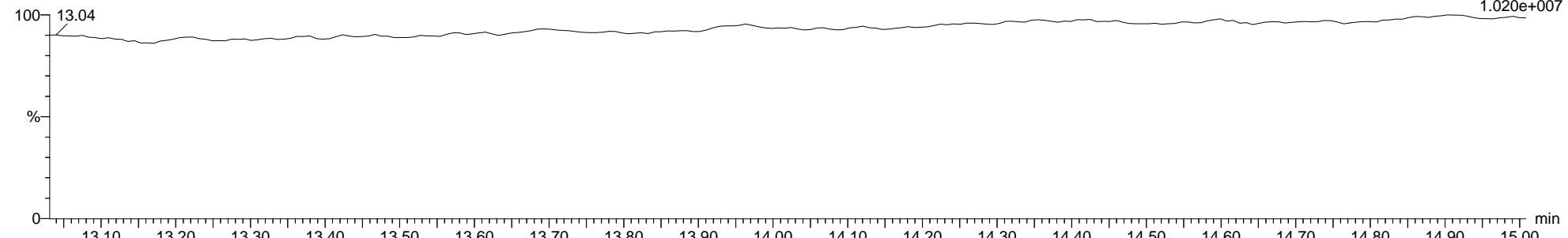
**\* PCB-54**5-151207C23 Smooth(Mn,1x1)  
MB WG2225462-15-151207C23 Smooth(Mn,1x1)  
MB WG2225462-15-151207C23 Smooth(Mn,1x1)  
MB WG2225462-15-151207C23 Smooth(Mn,1x1)  
MB WG2225462-1

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C23, Date: 08-Dec-2015, Time: 05:40:13, ID: WG2225462-1, Description: MB, Vial: Tray1:18

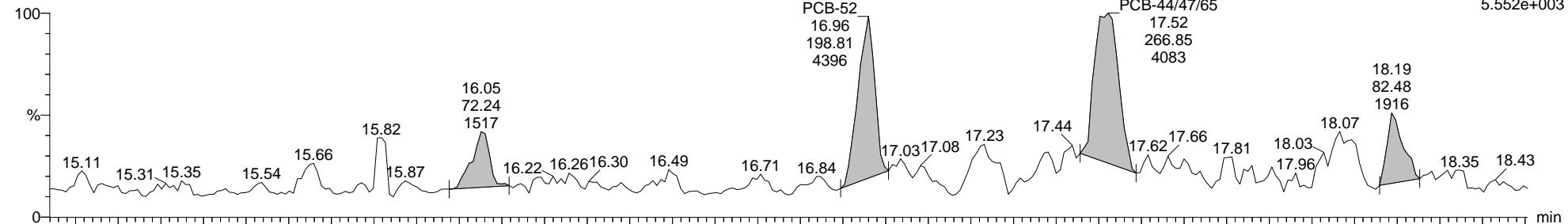
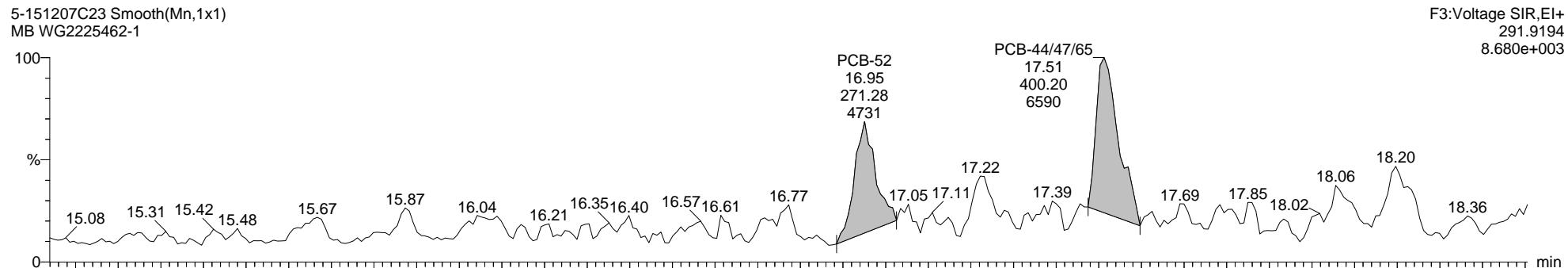
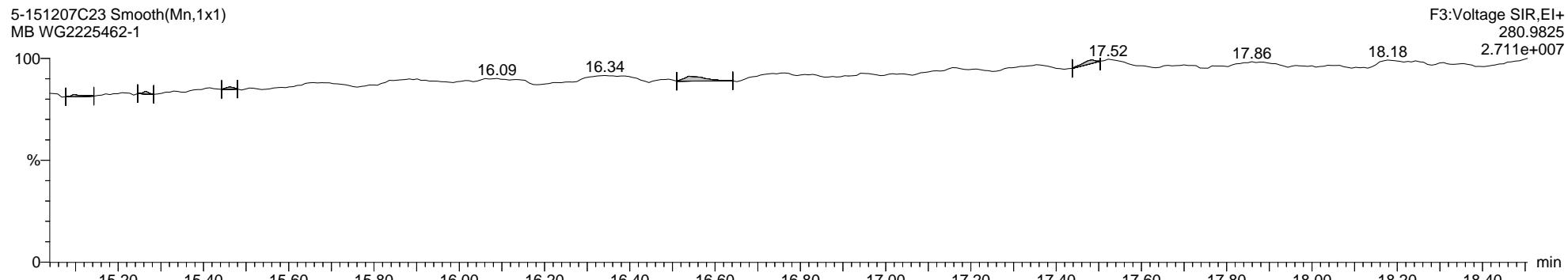
**13C-PCB-54**5-151207C23 Smooth(Mn,1x1)  
MB WG2225462-15-151207C23 Smooth(Mn,1x1)  
MB WG2225462-15-151207C23 Smooth(Mn,1x1)  
MB WG2225462-1

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C23, Date: 08-Dec-2015, Time: 05:40:13, ID: WG2225462-1, Description: MB, Vial: Tray1:18

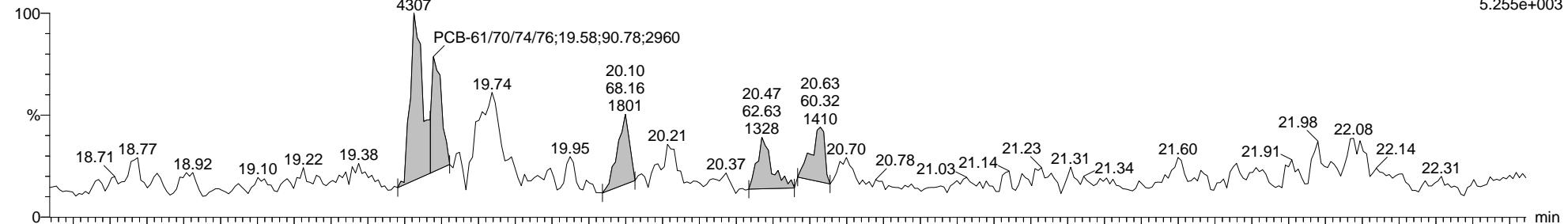
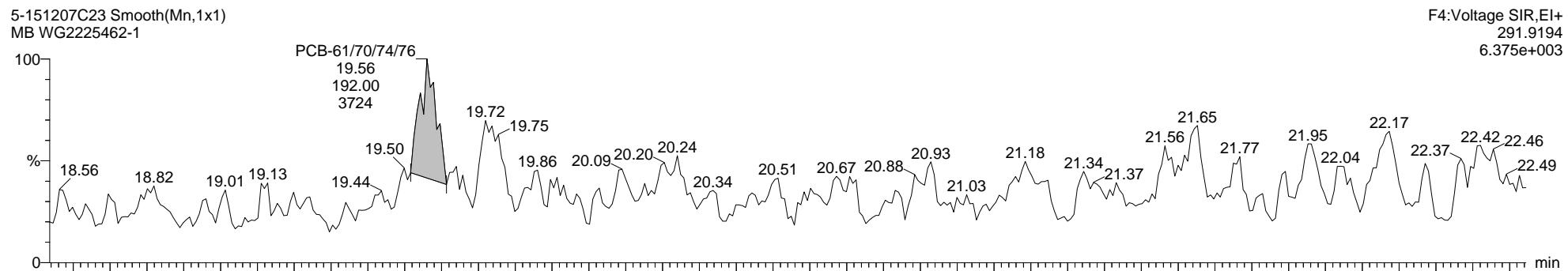
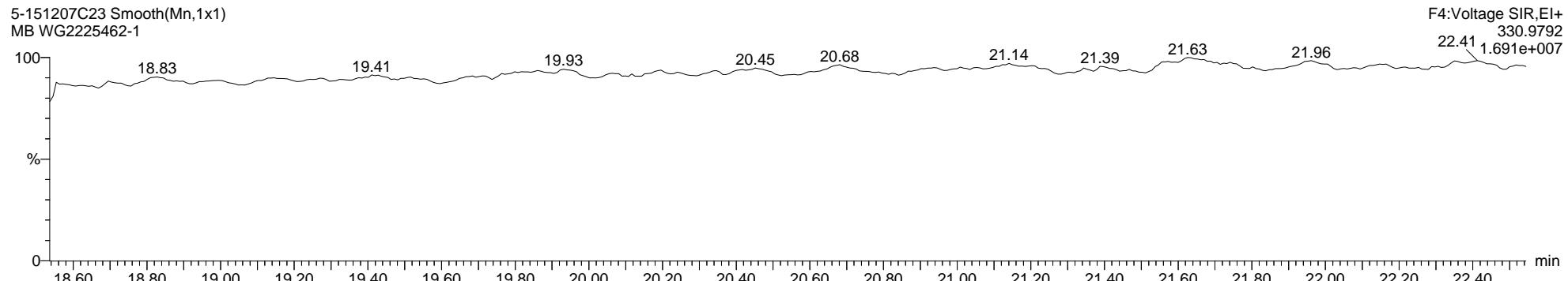
**\* PCB-50/53**5-151207C23 Smooth(Mn,1x1)  
MB WG2225462-15-151207C23 Smooth(Mn,1x1)  
MB WG2225462-15-151207C23 Smooth(Mn,1x1)  
MB WG2225462-1

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C23, Date: 08-Dec-2015, Time: 05:40:13, ID: WG2225462-1, Description: MB, Vial: Tray1:18

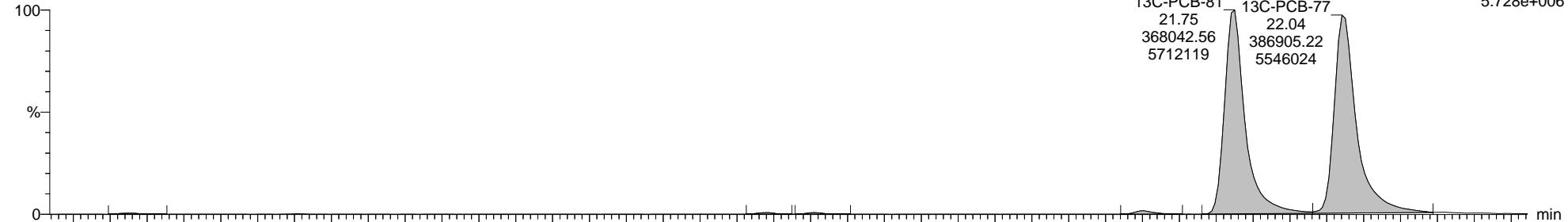
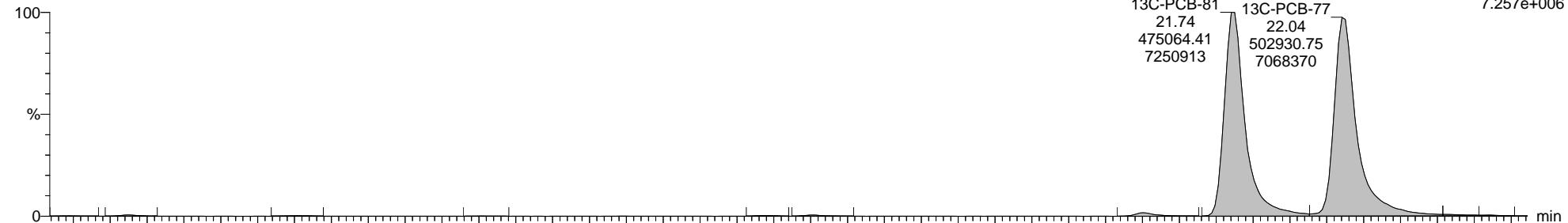
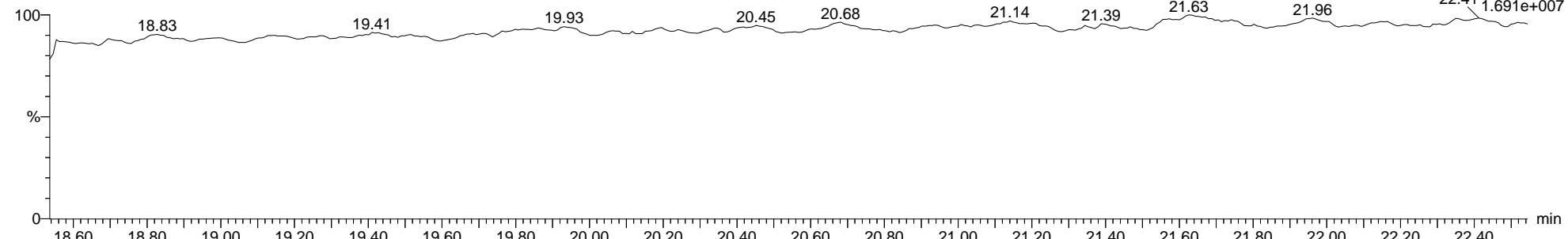
**PCB-81**5-151207C23 Smooth(Mn,1x1)  
MB WG2225462-15-151207C23 Smooth(Mn,1x1)  
MB WG2225462-15-151207C23 Smooth(Mn,1x1)  
MB WG2225462-1

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C23, Date: 08-Dec-2015, Time: 05:40:13, ID: WG2225462-1, Description: MB, Vial: Tray1:18

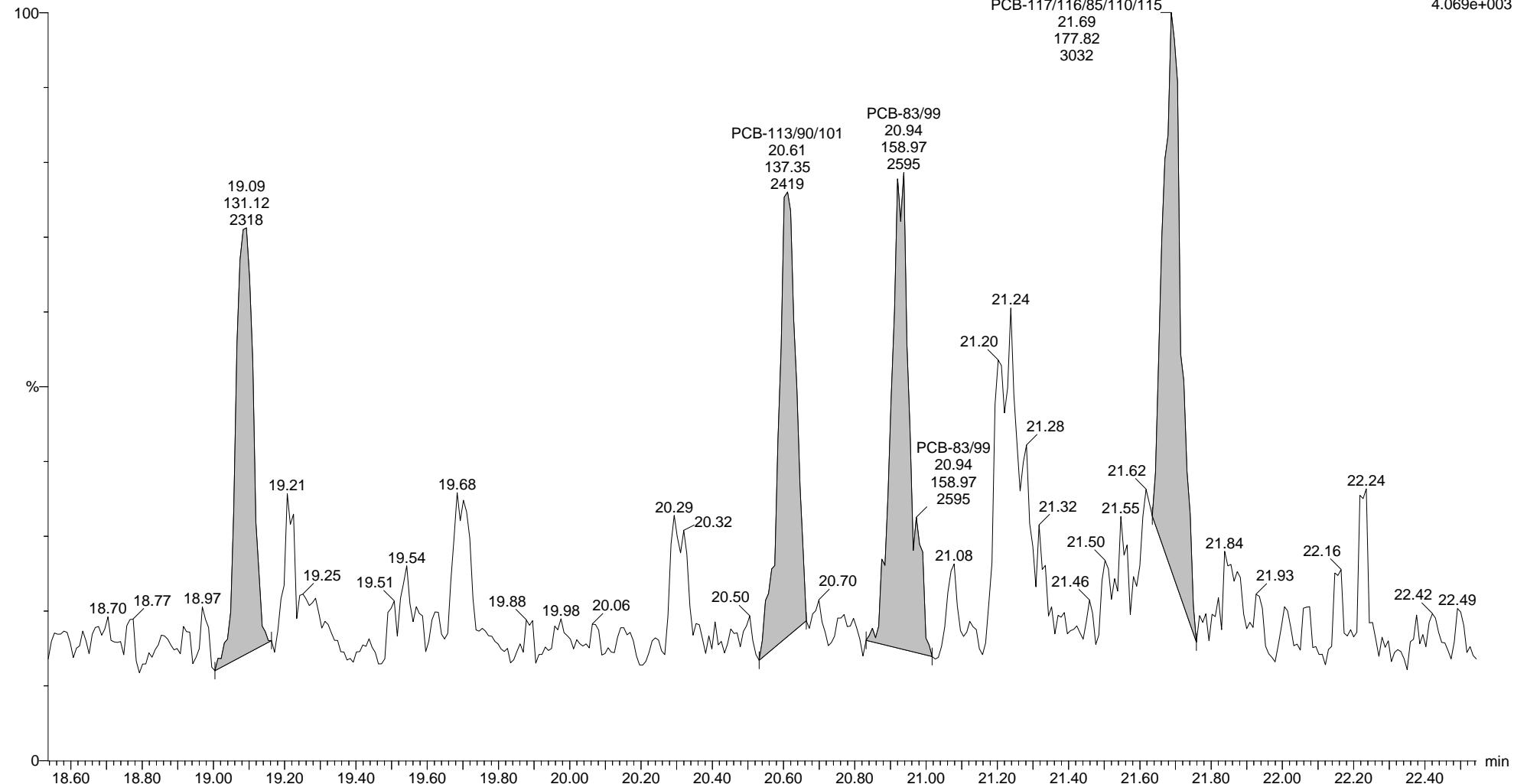
**13C-PCB-81**5-151207C23 Smooth(Mn,1x1)  
MB WG2225462-15-151207C23 Smooth(Mn,1x1)  
MB WG2225462-15-151207C23 Smooth(Mn,1x1)  
MB WG2225462-1

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C23, Date: 08-Dec-2015, Time: 05:40:13, ID: WG2225462-1, Description: MB, Vial: Tray1:18

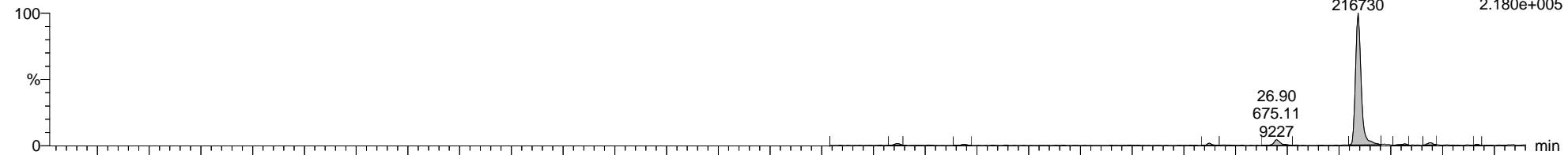
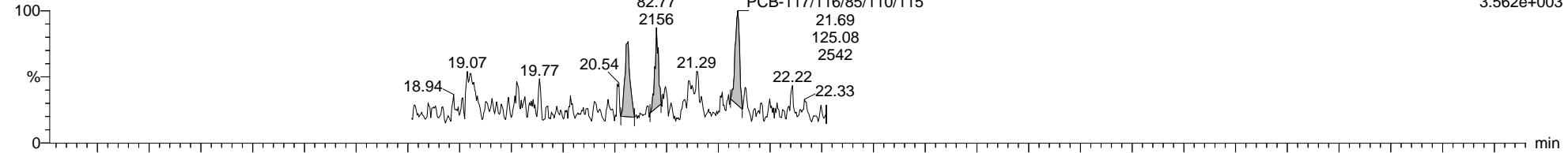
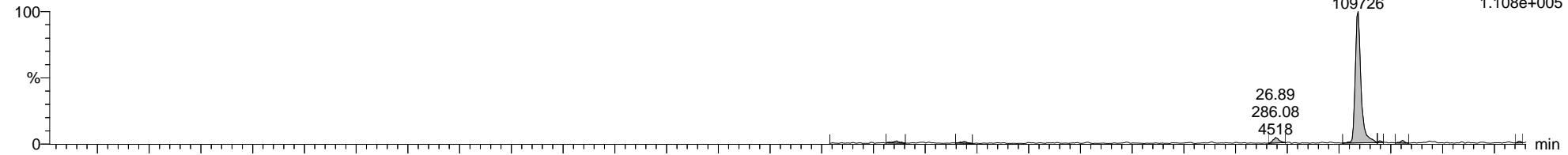
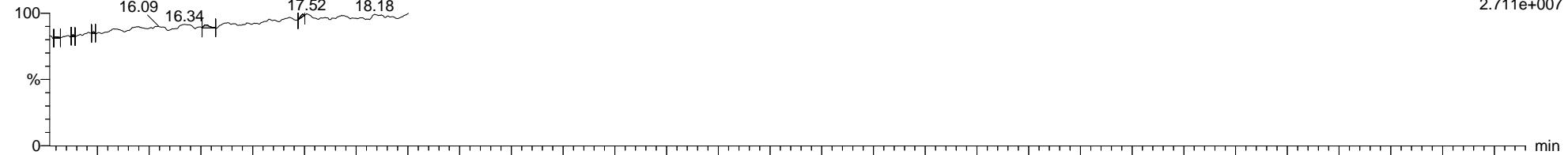
**\* PCB-104**5-151207C23 Smooth(Mn,1x1)  
MB WG2225462-1F4:Voltage SIR,ELI+  
325.8804  
4.069e+003

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C23, Date: 08-Dec-2015, Time: 05:40:13, ID: WG2225462-1, Description: MB, Vial: Tray1:18

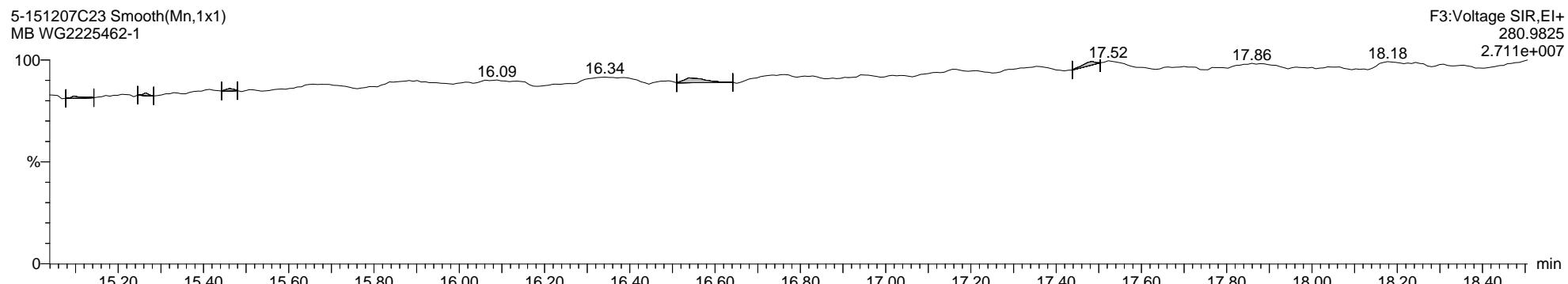
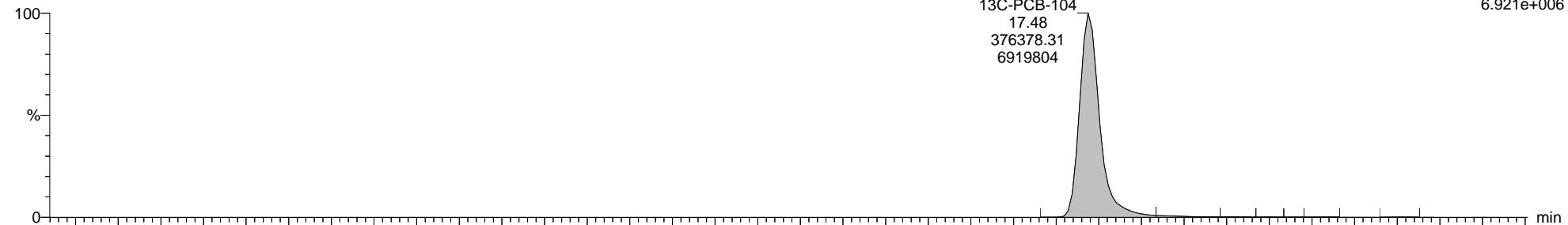
**\* PCB-104**5-151207C23 Smooth(Mn,1x1)  
MB WG2225462-15-151207C23 Smooth(Mn,1x1)  
MB WG2225462-15-151207C23 Smooth(Mn,1x1)  
MB WG2225462-15-151207C23 Smooth(Mn,1x1)  
MB WG2225462-1

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C23, Date: 08-Dec-2015, Time: 05:40:13, ID: WG2225462-1, Description: MB, Vial: Tray1:18

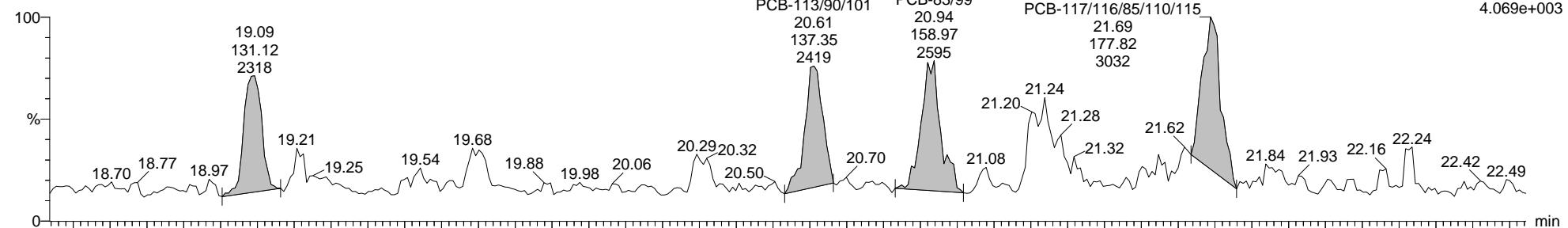
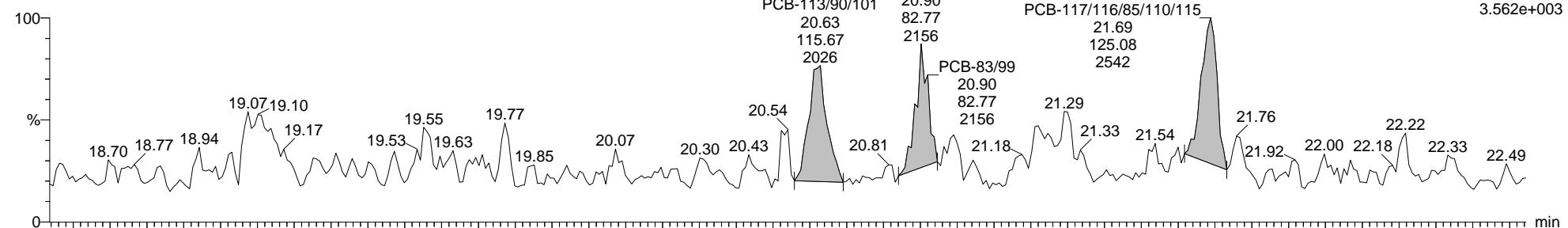
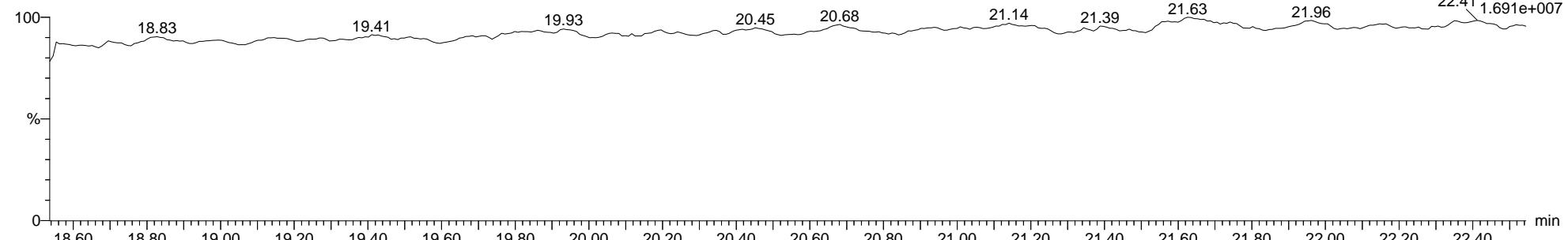
**13C-PCB-104**5-151207C23 Smooth(Mn,1x1)  
MB WG2225462-1

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C23, Date: 08-Dec-2015, Time: 05:40:13, ID: WG2225462-1, Description: MB, Vial: Tray1:18

**PCB-113/90/101**5-151207C23 Smooth(Mn,1x1)  
MB WG2225462-15-151207C23 Smooth(Mn,1x1)  
MB WG2225462-15-151207C23 Smooth(Mn,1x1)  
MB WG2225462-1

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

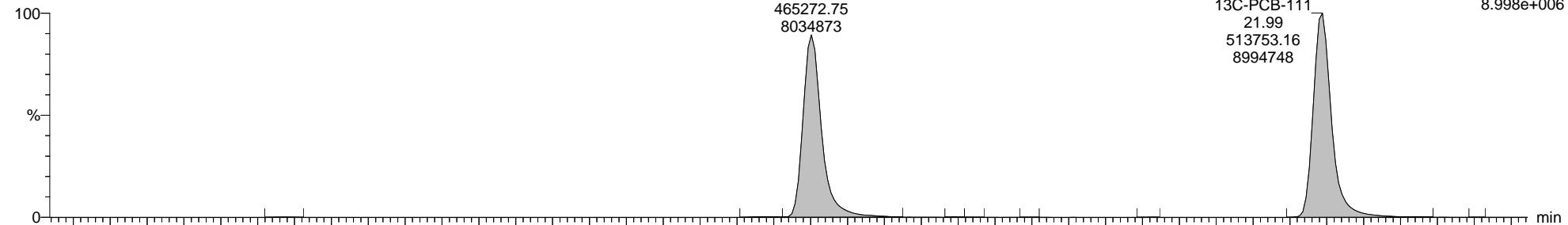
Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

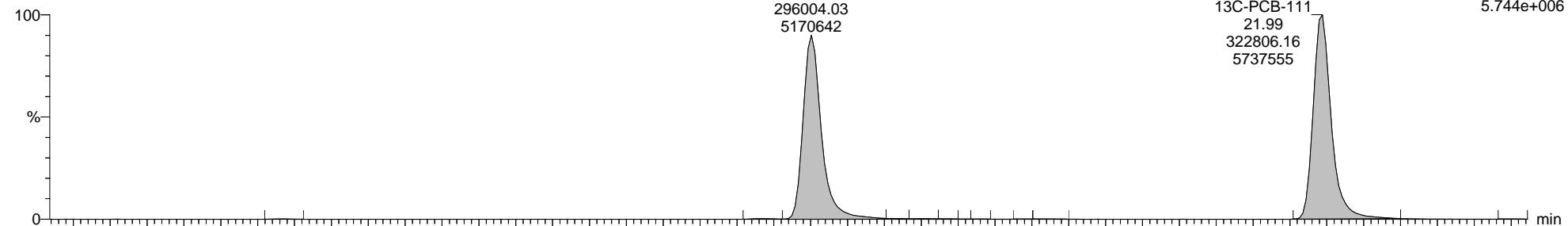
Name: 5-151207C23, Date: 08-Dec-2015, Time: 05:40:13, ID: WG2225462-1, Description: MB, Vial: Tray1:18

### 13C-PCB-101

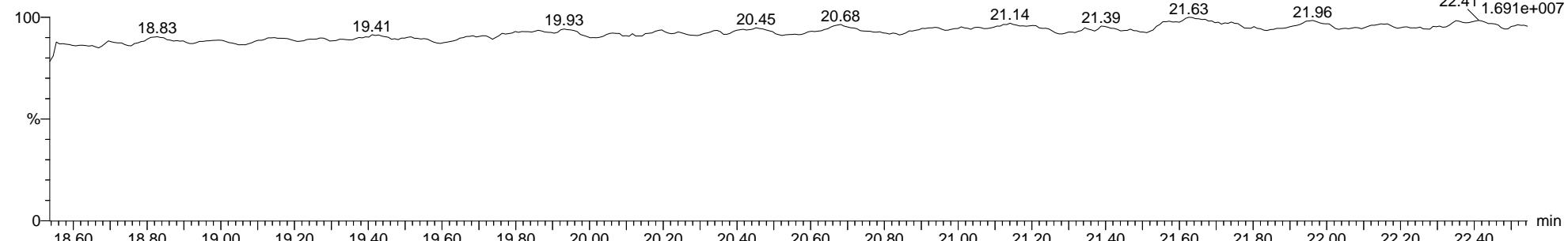
5-151207C23 Smooth(Mn,1x1)  
MB WG2225462-1



5-151207C23 Smooth(Mn,1x1)  
MB WG2225462-1



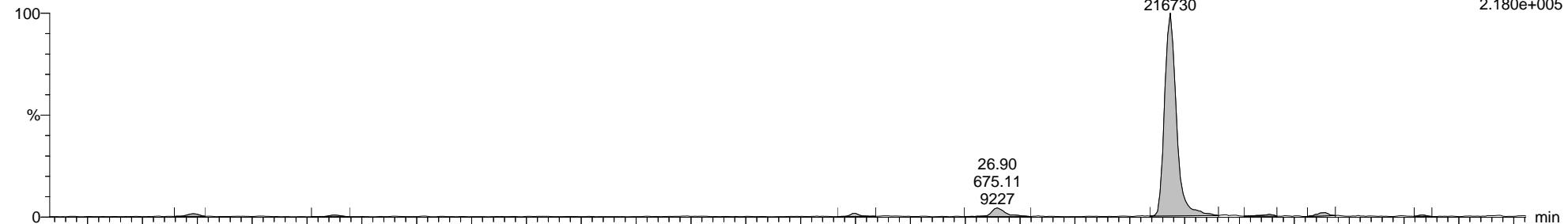
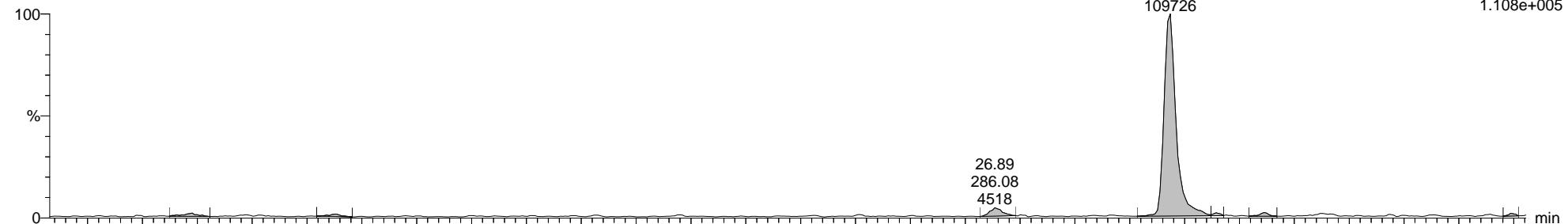
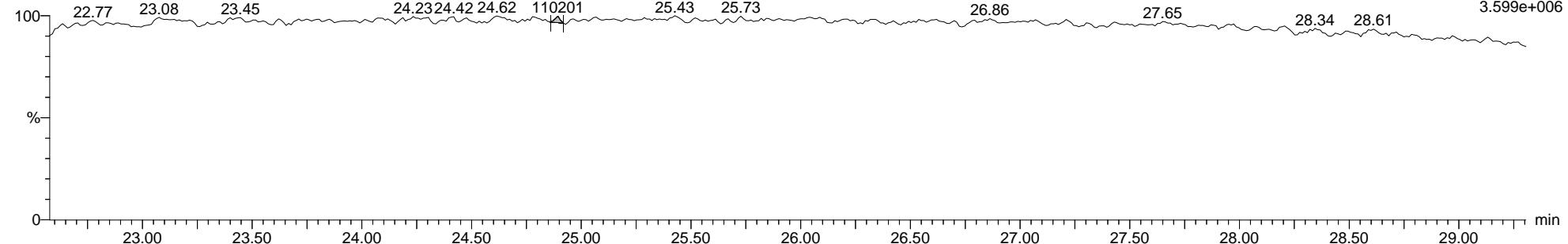
5-151207C23 Smooth(Mn,1x1)  
MB WG2225462-1



Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

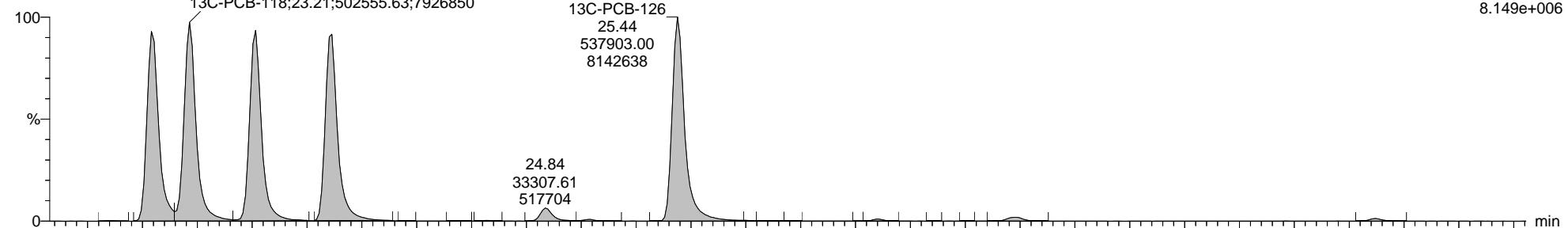
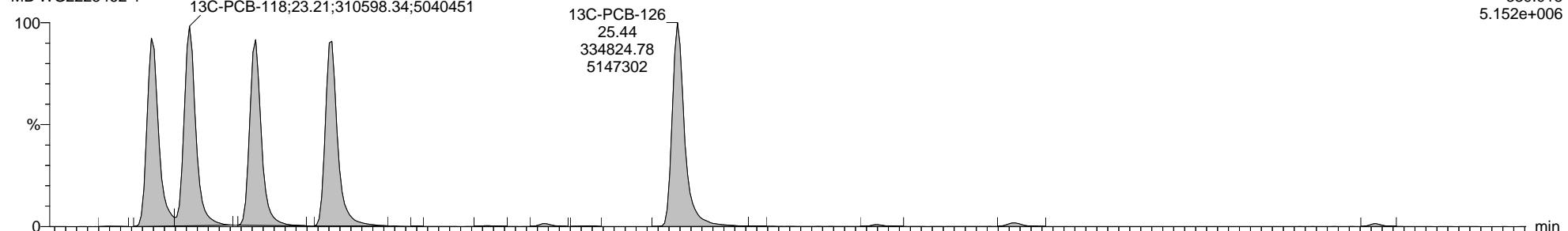
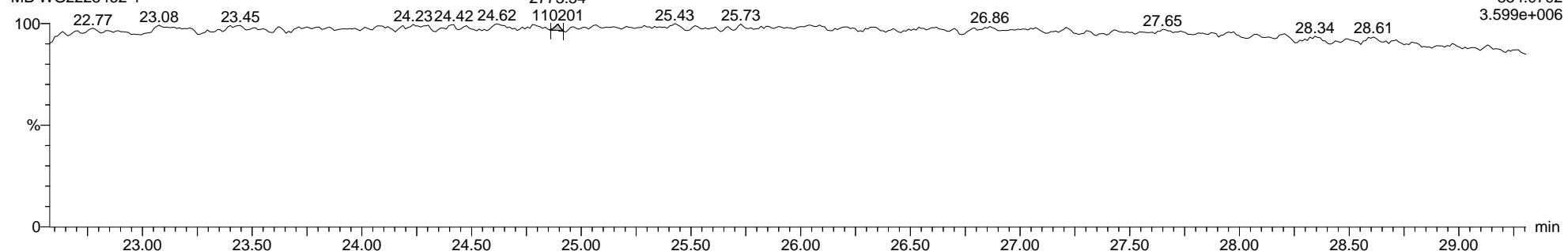
**Name: 5-151207C23, Date: 08-Dec-2015, Time: 05:40:13, ID: WG2225462-1, Description: MB, Vial: Tray1:18****PCB-123**5-151207C23 Smooth(Mn,1x1)  
MB WG2225462-15-151207C23 Smooth(Mn,1x1)  
MB WG2225462-15-151207C23 Smooth(Mn,1x1)  
MB WG2225462-1

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C23, Date: 08-Dec-2015, Time: 05:40:13, ID: WG2225462-1, Description: MB, Vial: Tray1:18

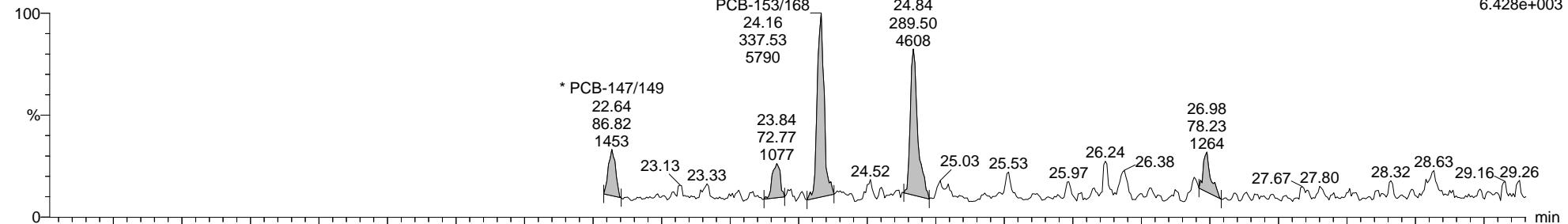
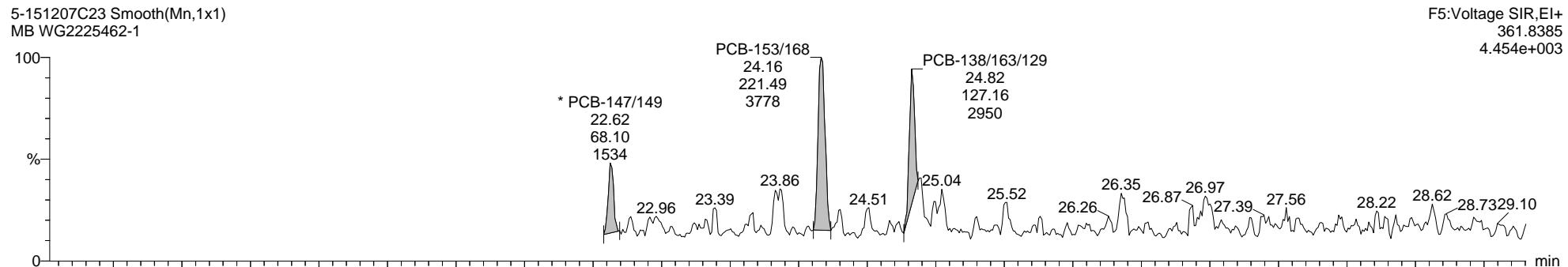
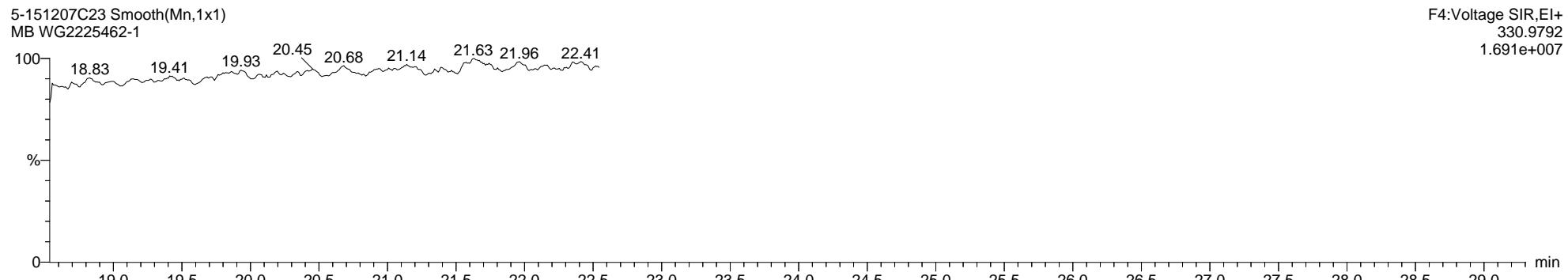
**13C-PCB-123**5-151207C23 Smooth(Mn,1x1)  
MB WG2225462-15-151207C23 Smooth(Mn,1x1)  
MB WG2225462-15-151207C23 Smooth(Mn,1x1)  
MB WG2225462-1

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C23, Date: 08-Dec-2015, Time: 05:40:13, ID: WG2225462-1, Description: MB, Vial: Tray1:18

**\* PCB-155**5-151207C23 Smooth(Mn,1x1)  
MB WG2225462-15-151207C23 Smooth(Mn,1x1)  
MB WG2225462-15-151207C23 Smooth(Mn,1x1)  
MB WG2225462-1

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

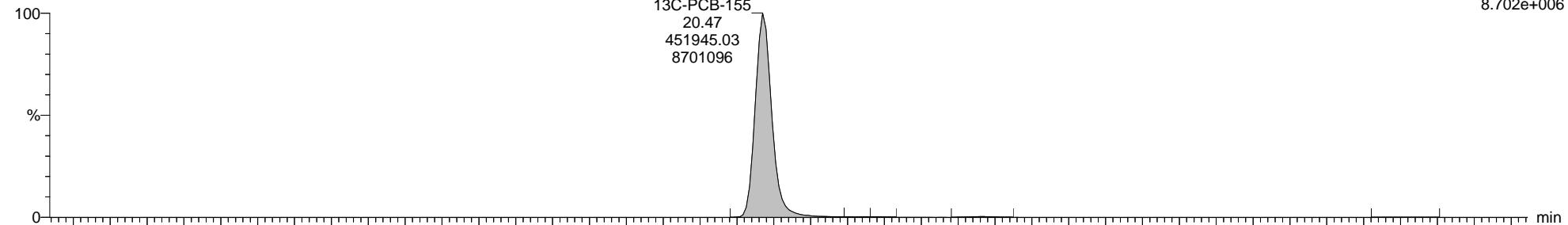
Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

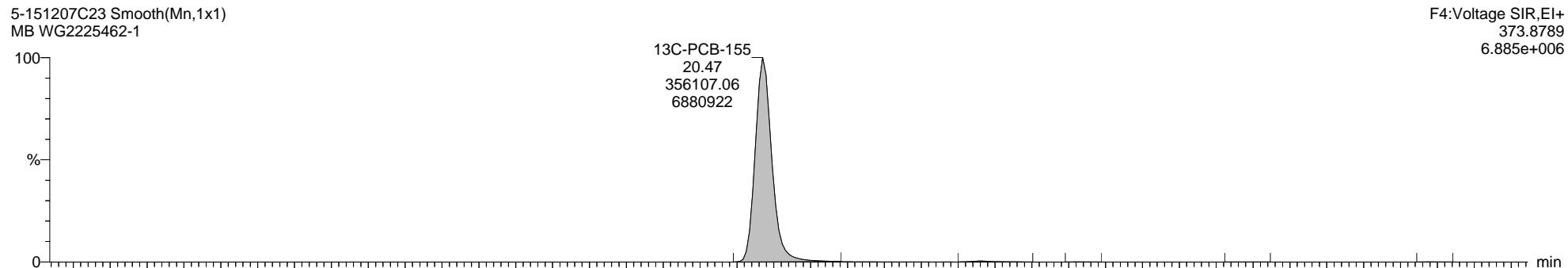
Name: 5-151207C23, Date: 08-Dec-2015, Time: 05:40:13, ID: WG2225462-1, Description: MB, Vial: Tray1:18

### 13C-PCB-155

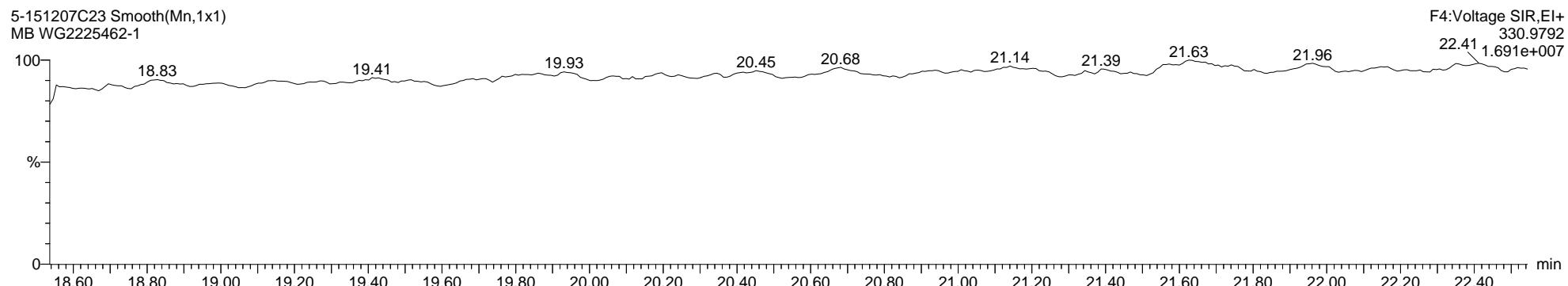
5-151207C23 Smooth(Mn,1x1)  
MB WG2225462-1



5-151207C23 Smooth(Mn,1x1)  
MB WG2225462-1



5-151207C23 Smooth(Mn,1x1)  
MB WG2225462-1

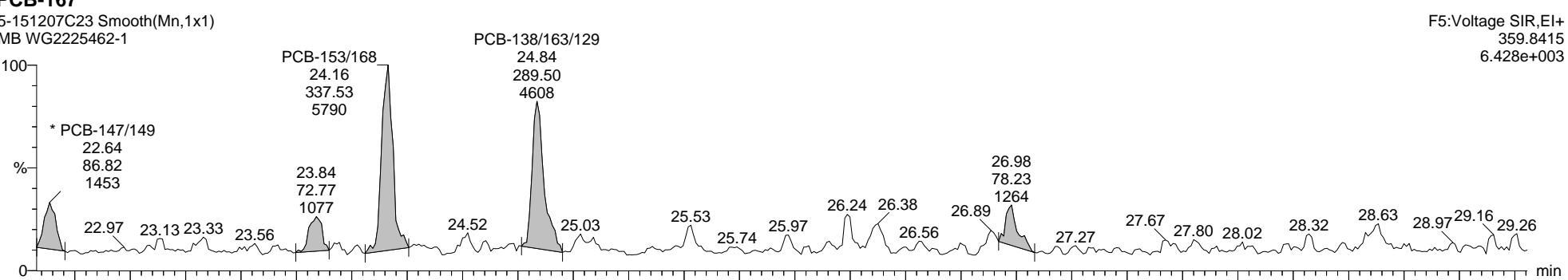
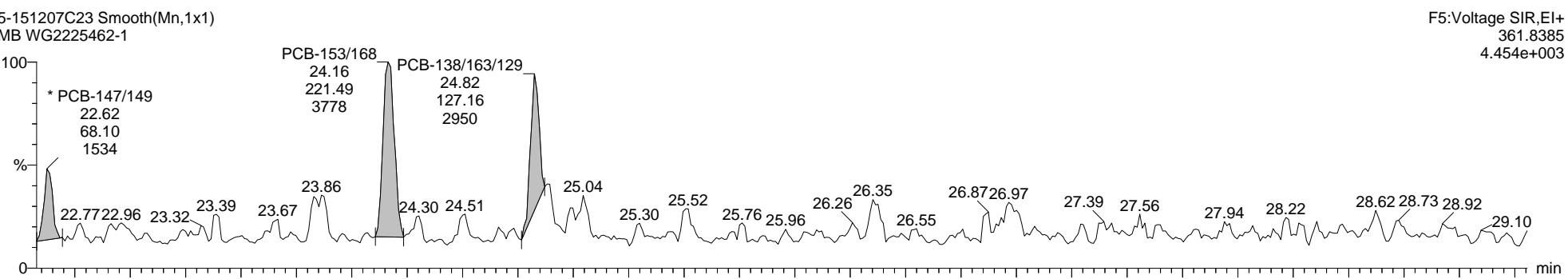
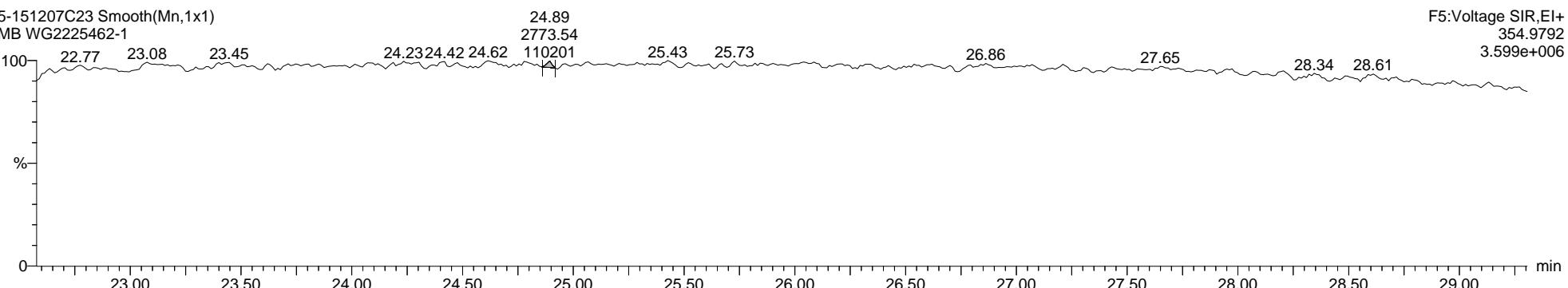


Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C23, Date: 08-Dec-2015, Time: 05:40:13, ID: WG2225462-1, Description: MB, Vial: Tray1:18

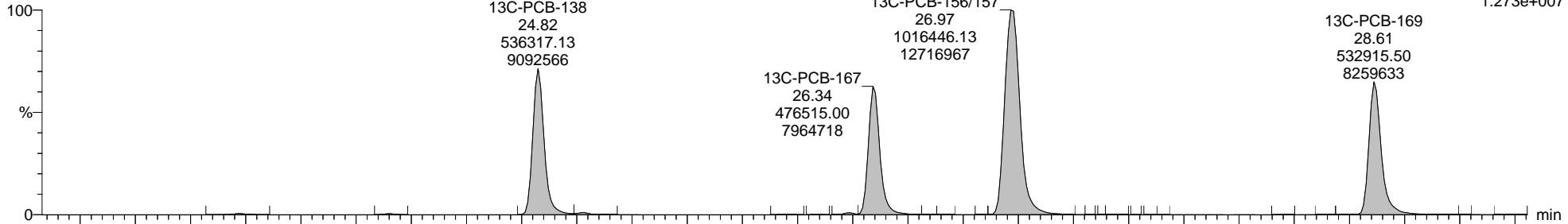
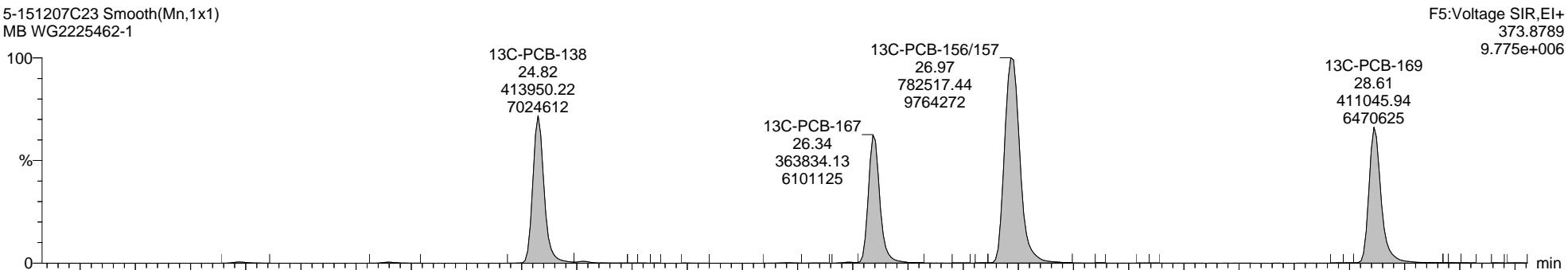
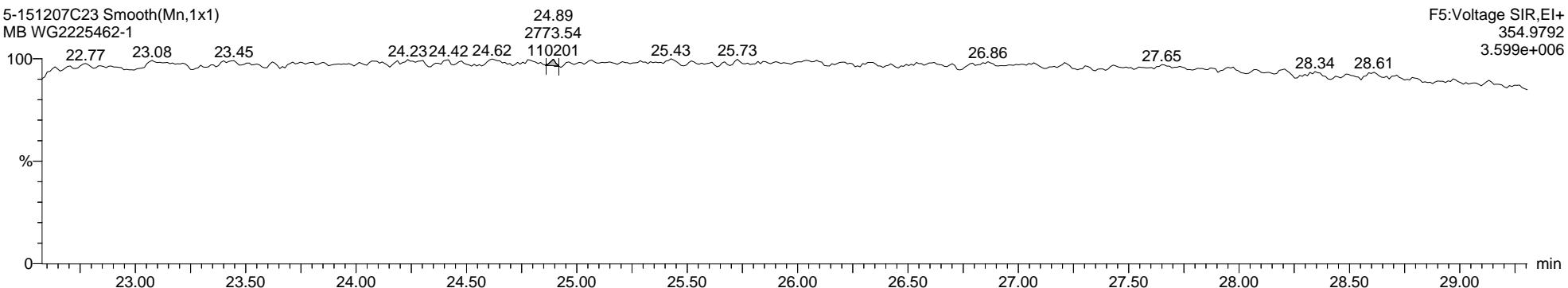
**PCB-167**5-151207C23 Smooth(Mn,1x1)  
MB WG2225462-15-151207C23 Smooth(Mn,1x1)  
MB WG2225462-15-151207C23 Smooth(Mn,1x1)  
MB WG2225462-1

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C23, Date: 08-Dec-2015, Time: 05:40:13, ID: WG2225462-1, Description: MB, Vial: Tray1:18

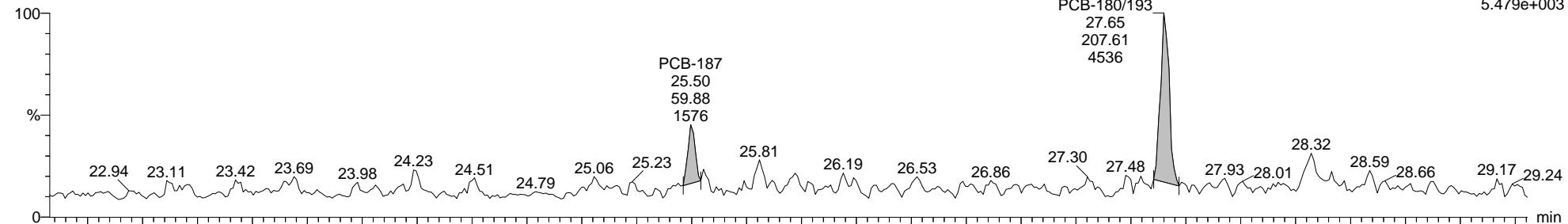
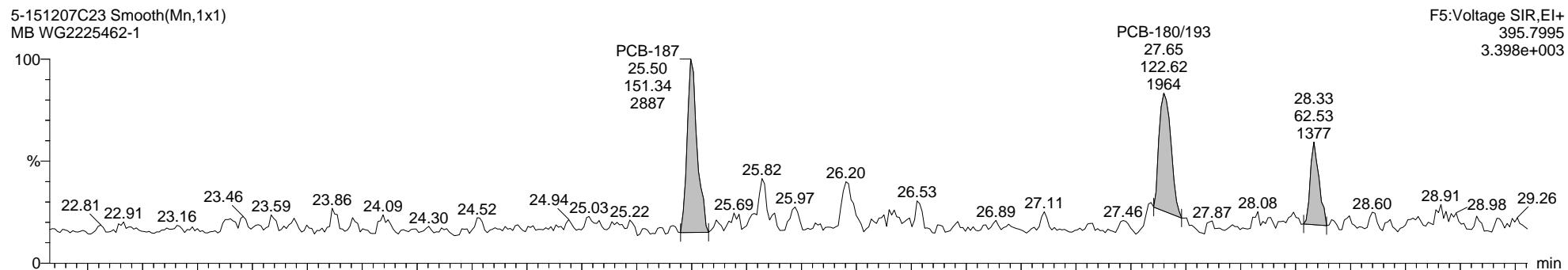
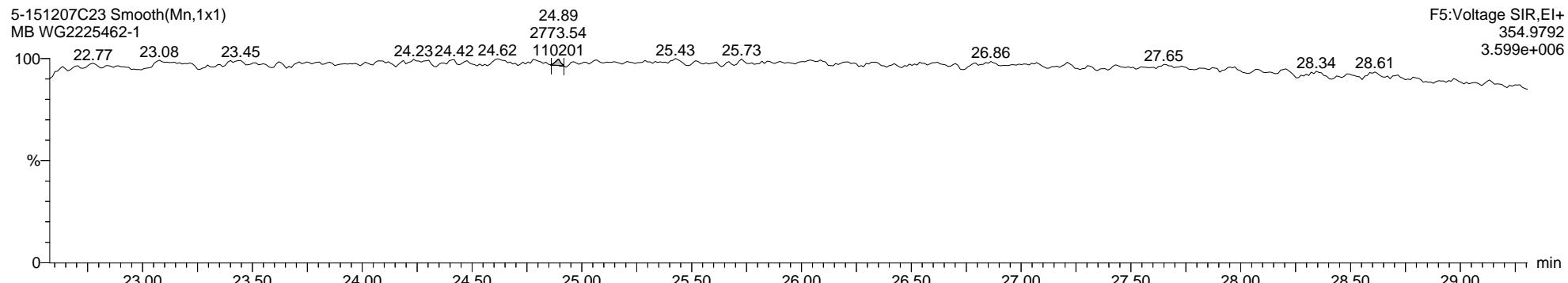
**13C-PCB-167**5-151207C23 Smooth(Mn,1x1)  
MB WG2225462-15-151207C23 Smooth(Mn,1x1)  
MB WG2225462-15-151207C23 Smooth(Mn,1x1)  
MB WG2225462-1

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C23, Date: 08-Dec-2015, Time: 05:40:13, ID: WG2225462-1, Description: MB, Vial: Tray1:18

**\* PCB-188**5-151207C23 Smooth(Mn,1x1)  
MB WG2225462-15-151207C23 Smooth(Mn,1x1)  
MB WG2225462-15-151207C23 Smooth(Mn,1x1)  
MB WG2225462-1

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

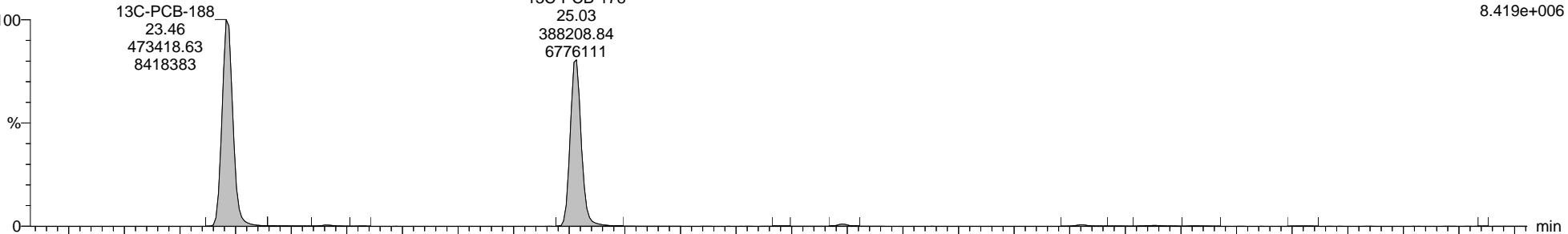
Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C23, Date: 08-Dec-2015, Time: 05:40:13, ID: WG2225462-1, Description: MB, Vial: Tray1:18

### 13C-PCB-188

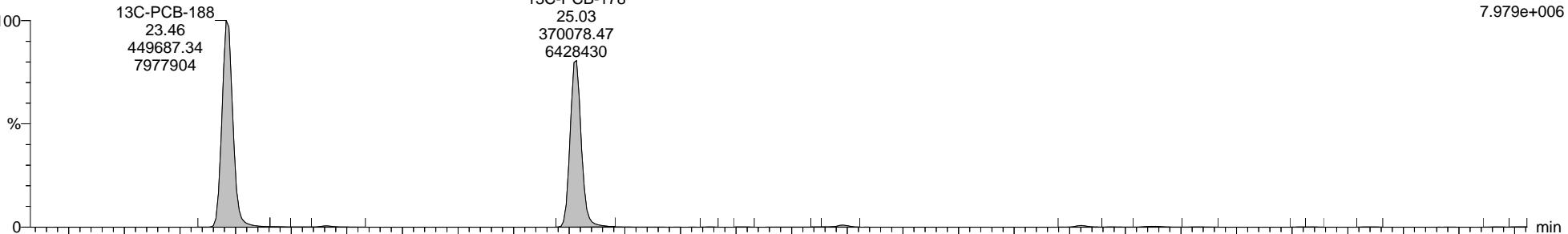
5-151207C23 Smooth(Mn,1x1)

MB WG2225462-1



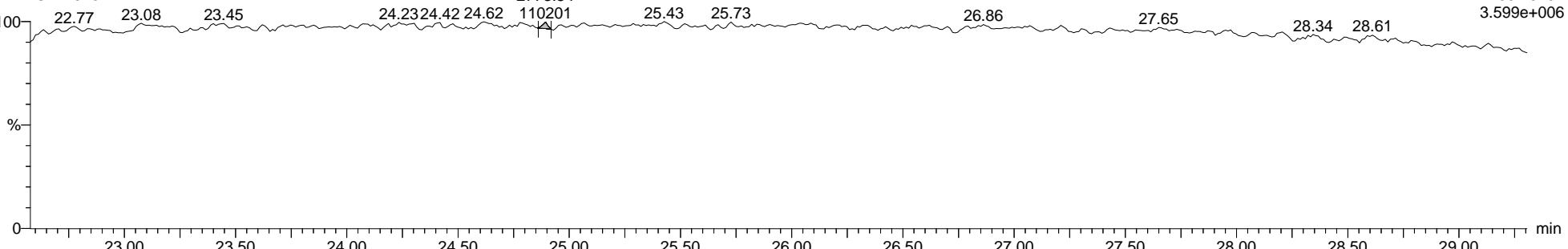
5-151207C23 Smooth(Mn,1x1)

MB WG2225462-1



5-151207C23 Smooth(Mn,1x1)

MB WG2225462-1

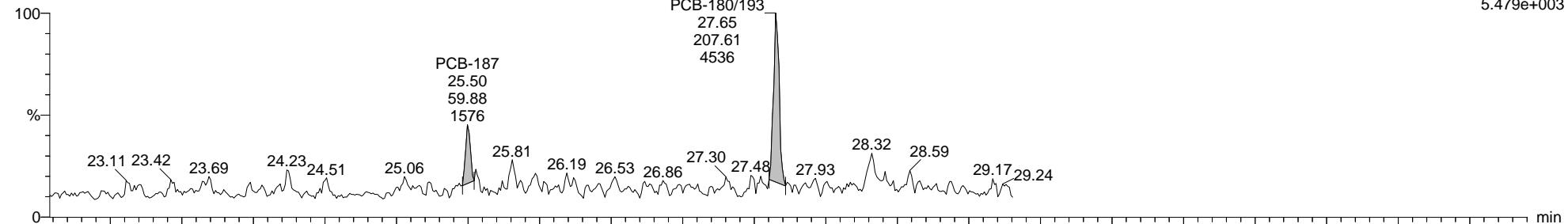
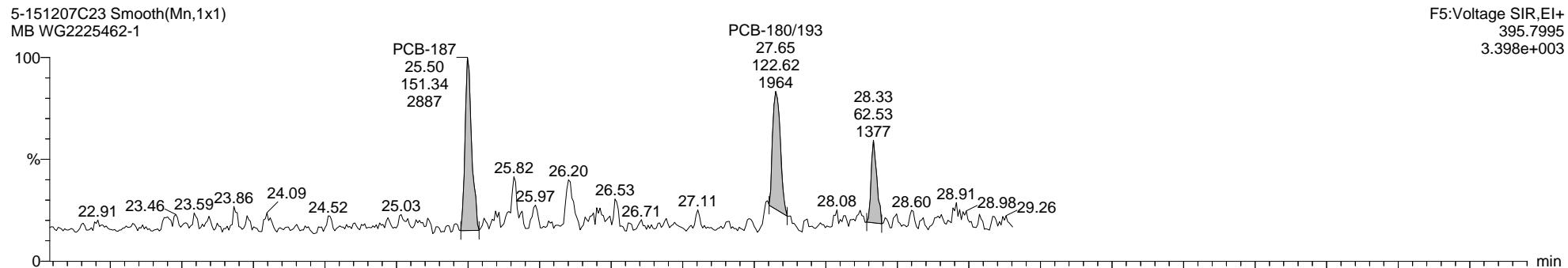
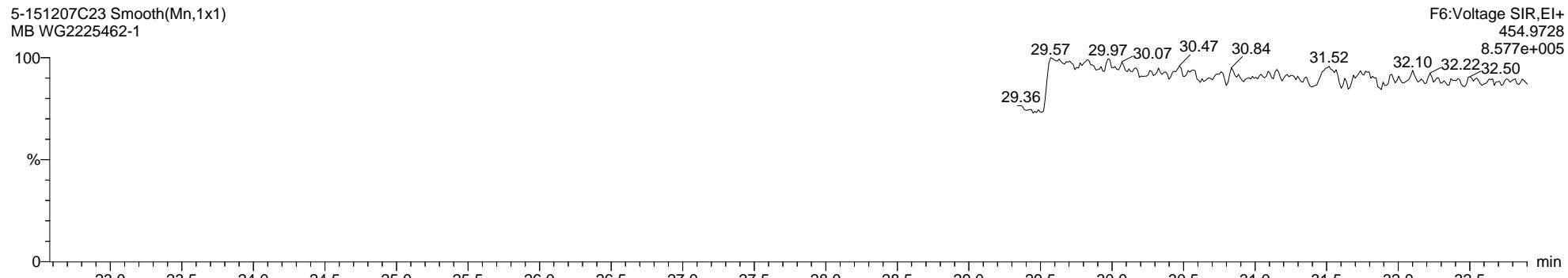


Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C23, Date: 08-Dec-2015, Time: 05:40:13, ID: WG2225462-1, Description: MB, Vial: Tray1:18

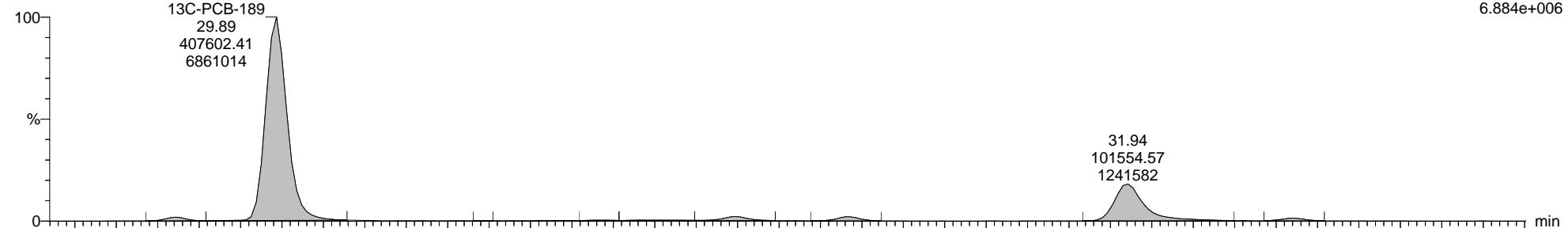
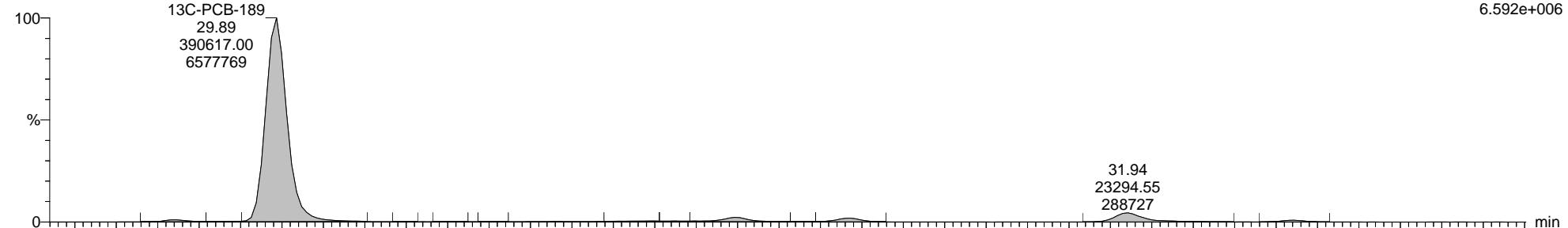
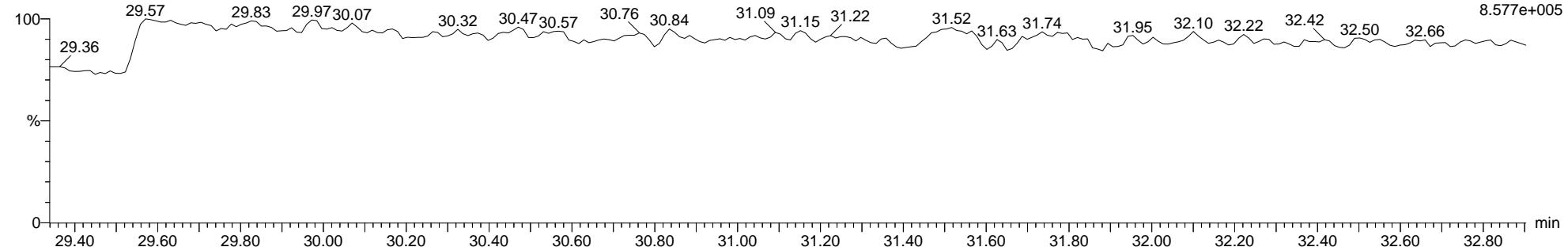
**\* PCB-189**5-151207C23 Smooth(Mn,1x1)  
MB WG2225462-15-151207C23 Smooth(Mn,1x1)  
MB WG2225462-15-151207C23 Smooth(Mn,1x1)  
MB WG2225462-1

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C23, Date: 08-Dec-2015, Time: 05:40:13, ID: WG2225462-1, Description: MB, Vial: Tray1:18

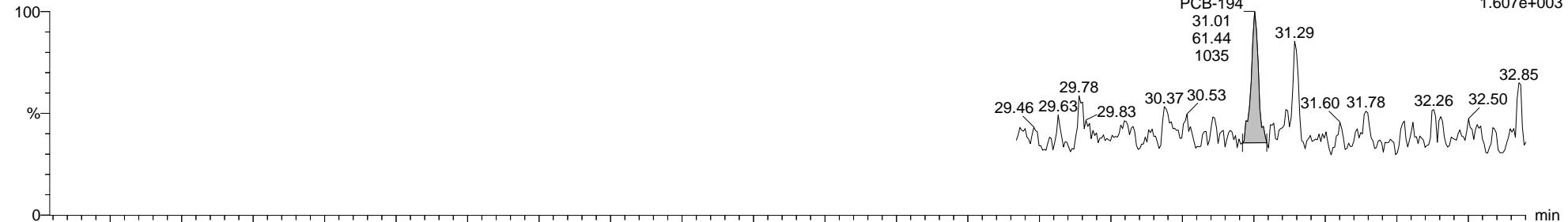
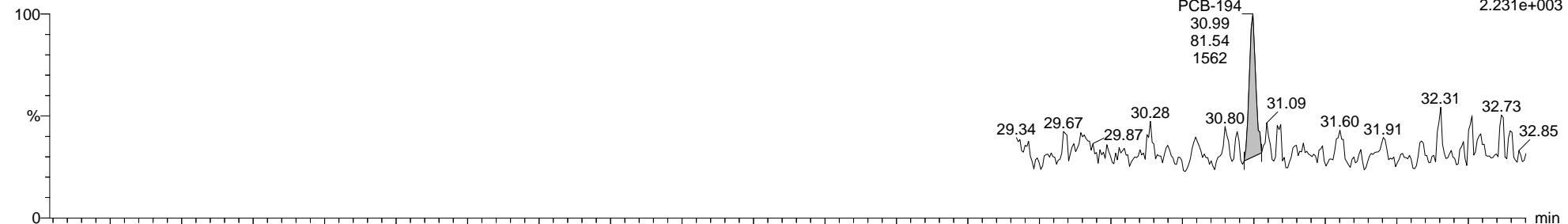
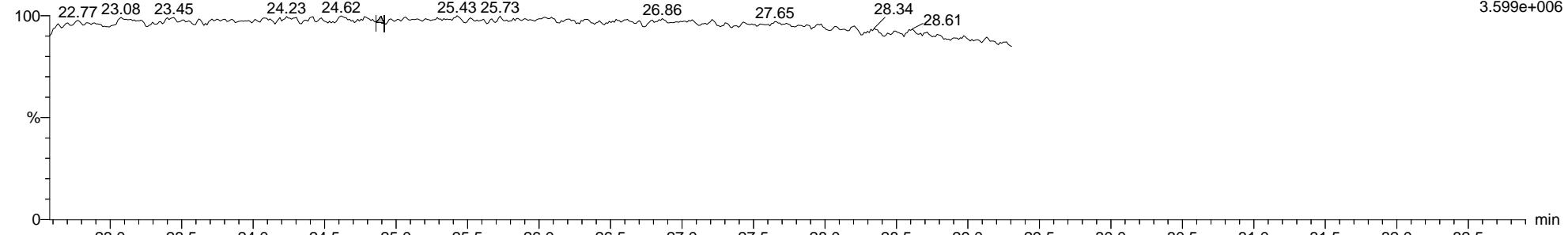
**13C-PCB-189**5-151207C23 Smooth(Mn,1x1)  
MB WG2225462-15-151207C23 Smooth(Mn,1x1)  
MB WG2225462-15-151207C23 Smooth(Mn,1x1)  
MB WG2225462-1

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

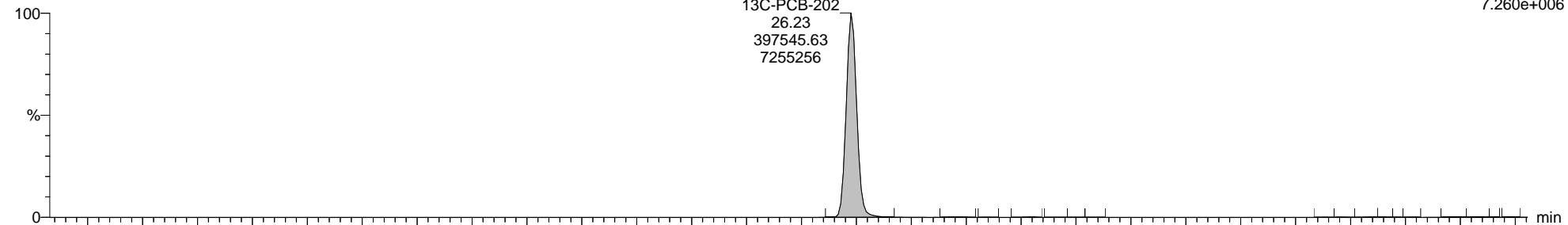
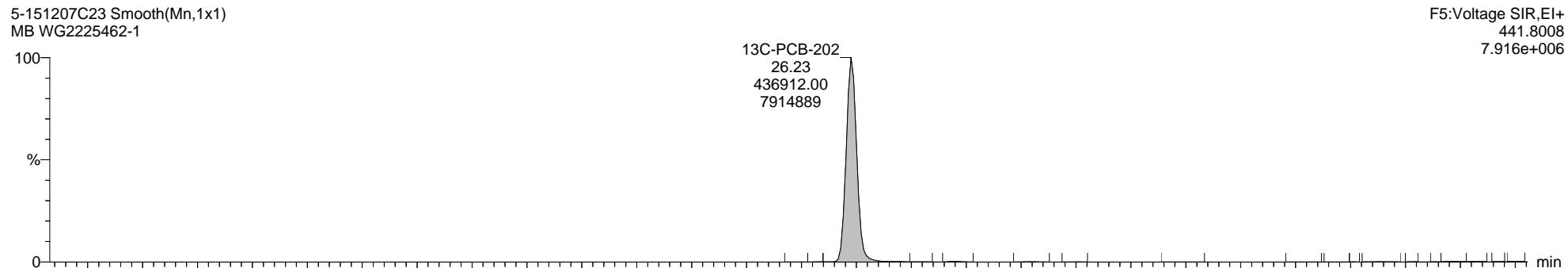
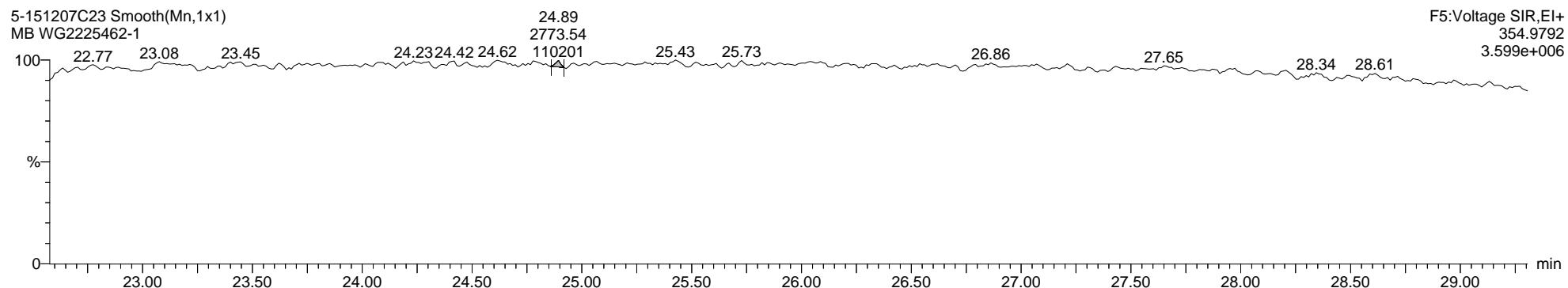
Name: 5-151207C23, Date: 08-Dec-2015, Time: 05:40:13, ID: WG2225462-1, Description: MB, Vial: Tray1:18

**\* PCB-202**5-151207C23 Smooth(Mn,1x1)  
MB WG2225462-15-151207C23 Smooth(Mn,1x1)  
MB WG2225462-15-151207C23 Smooth(Mn,1x1)  
MB WG2225462-1

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

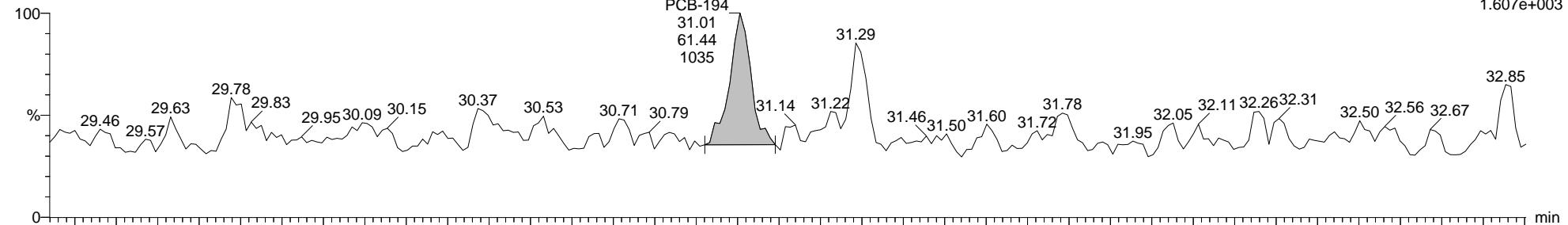
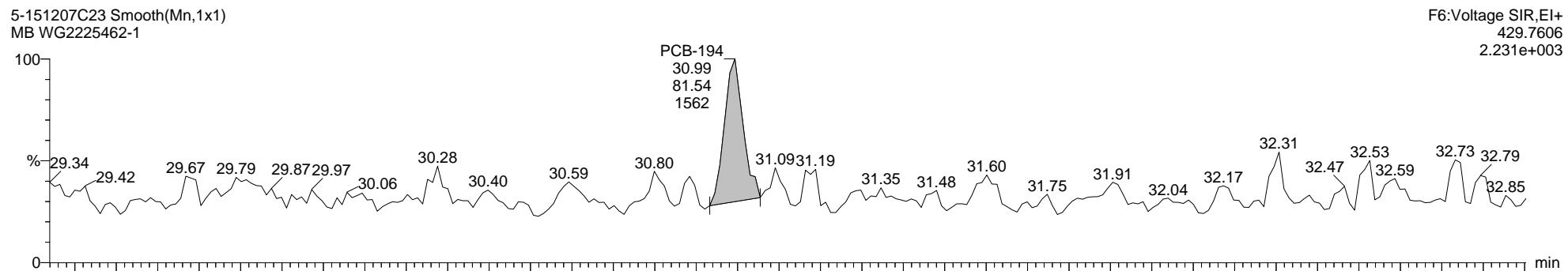
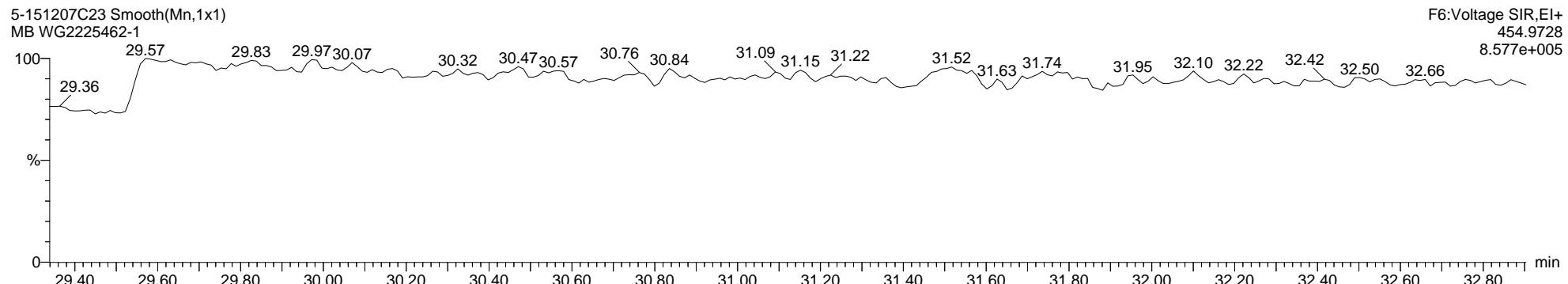
**Name: 5-151207C23, Date: 08-Dec-2015, Time: 05:40:13, ID: WG2225462-1, Description: MB, Vial: Tray1:18****13C-PCB-202**5-151207C23 Smooth(Mn,1x1)  
MB WG2225462-15-151207C23 Smooth(Mn,1x1)  
MB WG2225462-15-151207C23 Smooth(Mn,1x1)  
MB WG2225462-1

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

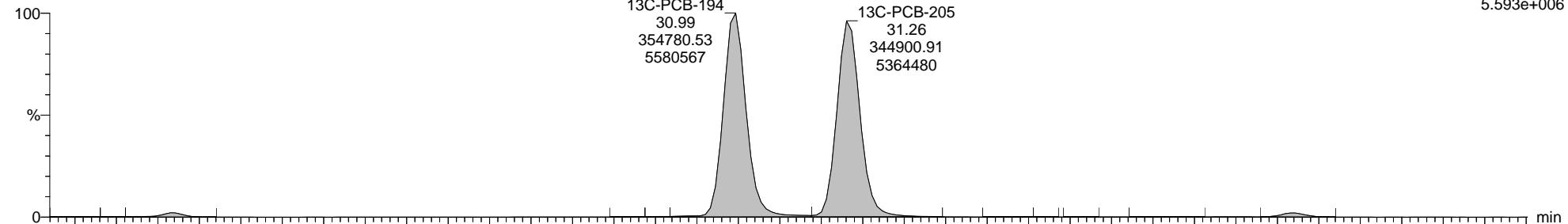
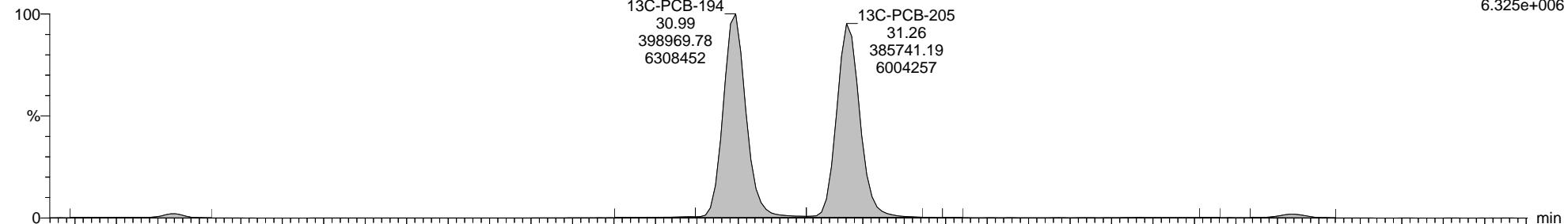
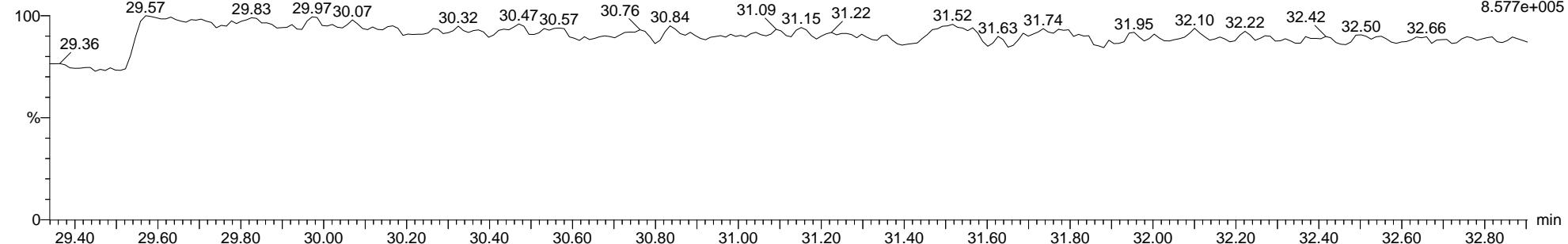
Name: 5-151207C23, Date: 08-Dec-2015, Time: 05:40:13, ID: WG2225462-1, Description: MB, Vial: Tray1:18

**\* PCB-195**5-151207C23 Smooth(Mn,1x1)  
MB WG2225462-15-151207C23 Smooth(Mn,1x1)  
MB WG2225462-15-151207C23 Smooth(Mn,1x1)  
MB WG2225462-1

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

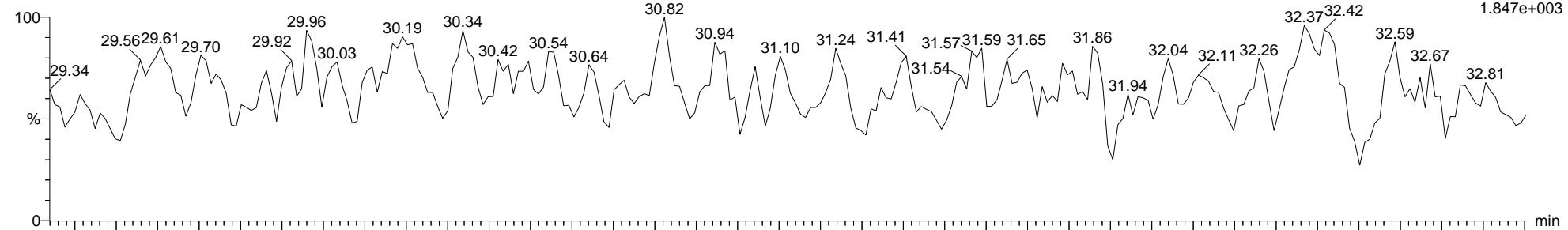
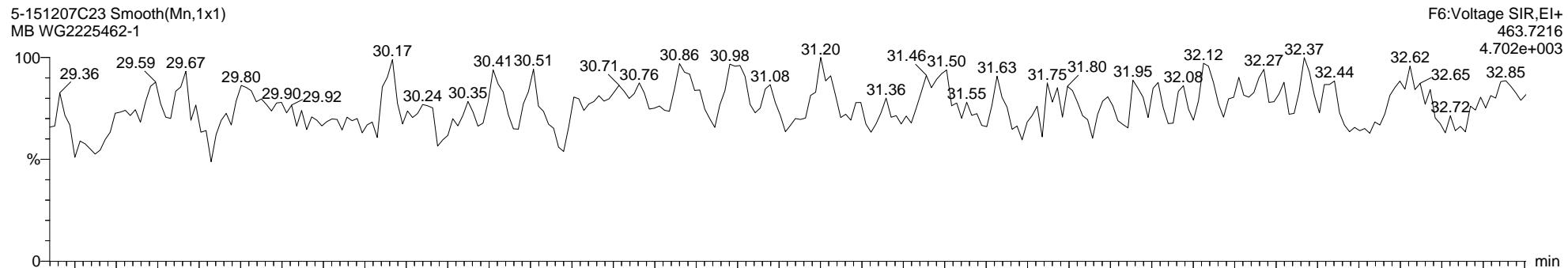
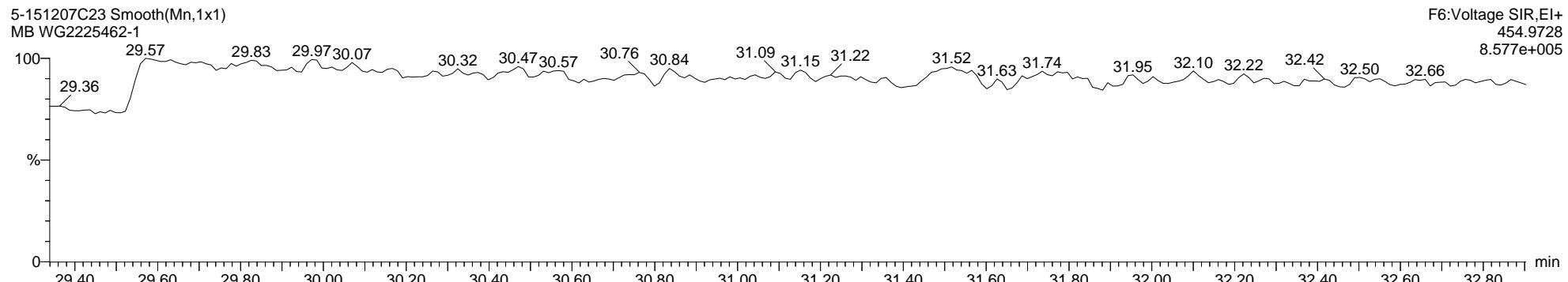
**Name: 5-151207C23, Date: 08-Dec-2015, Time: 05:40:13, ID: WG2225462-1, Description: MB, Vial: Tray1:18****13C-PCB-205**5-151207C23 Smooth(Mn,1x1)  
MB WG2225462-15-151207C23 Smooth(Mn,1x1)  
MB WG2225462-15-151207C23 Smooth(Mn,1x1)  
MB WG2225462-1

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C23, Date: 08-Dec-2015, Time: 05:40:13, ID: WG2225462-1, Description: MB, Vial: Tray1:18

**\* PCB-208**5-151207C23 Smooth(Mn,1x1)  
MB WG2225462-15-151207C23 Smooth(Mn,1x1)  
MB WG2225462-15-151207C23 Smooth(Mn,1x1)  
MB WG2225462-1

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

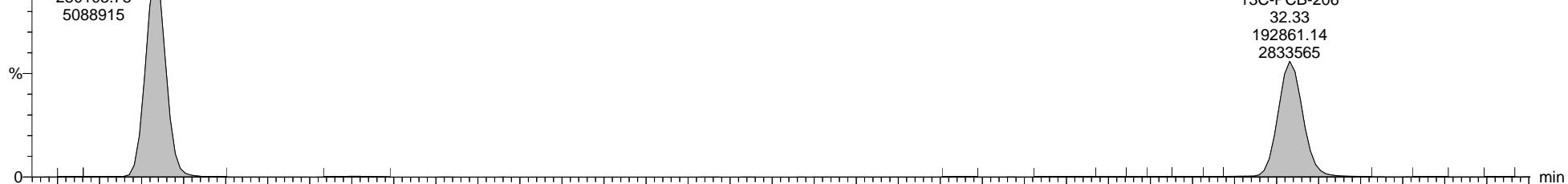
Name: 5-151207C23, Date: 08-Dec-2015, Time: 05:40:13, ID: WG2225462-1, Description: MB, Vial: Tray1:18

**13C-PCB-208**

5-151207C23 Smooth(Mn,1x1)

MB WG2225462-1

13C-PCB-208

29.63  
280103.78  
5088915F6:Voltage SIR,EI+  
473.7648  
5.094e+00613C-PCB-206  
32.33  
192861.14  
2833565

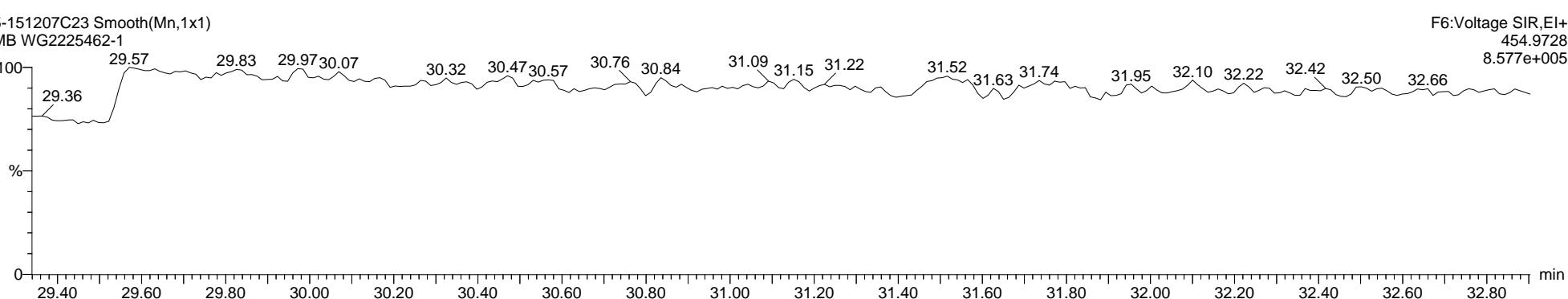
5-151207C23 Smooth(Mn,1x1)

MB WG2225462-1

13C-PCB-208  
29.63  
365051.44  
6563903F6:Voltage SIR,EI+  
475.7619  
6.569e+00613C-PCB-206  
32.33  
249134.30  
3655568

5-151207C23 Smooth(Mn,1x1)

MB WG2225462-1

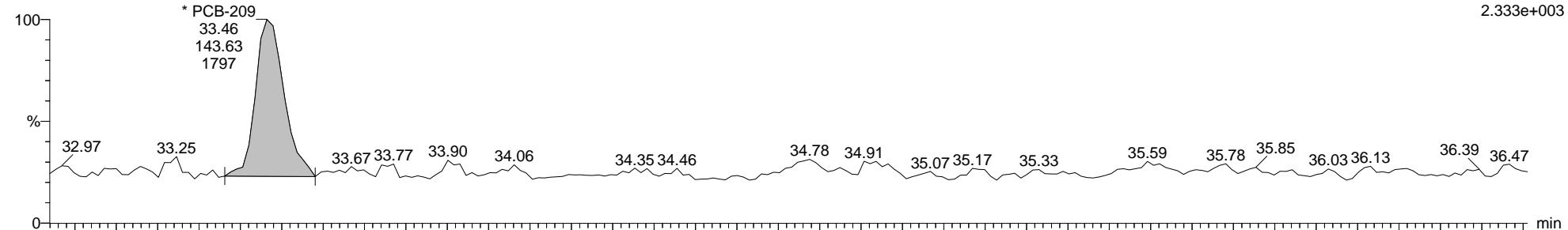
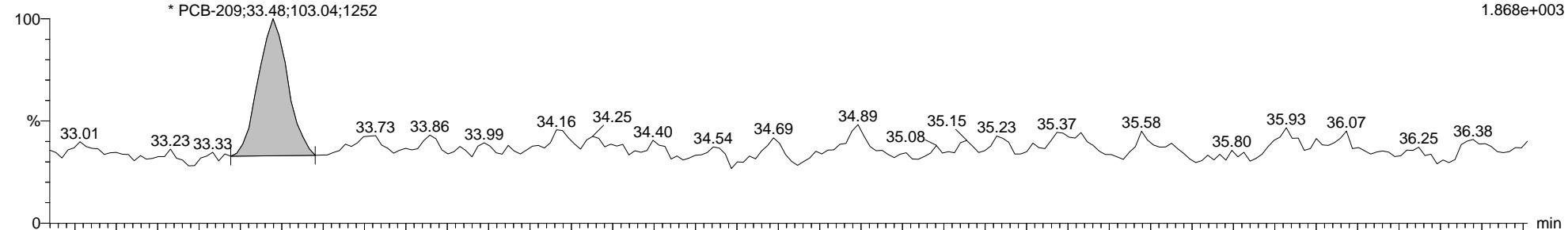
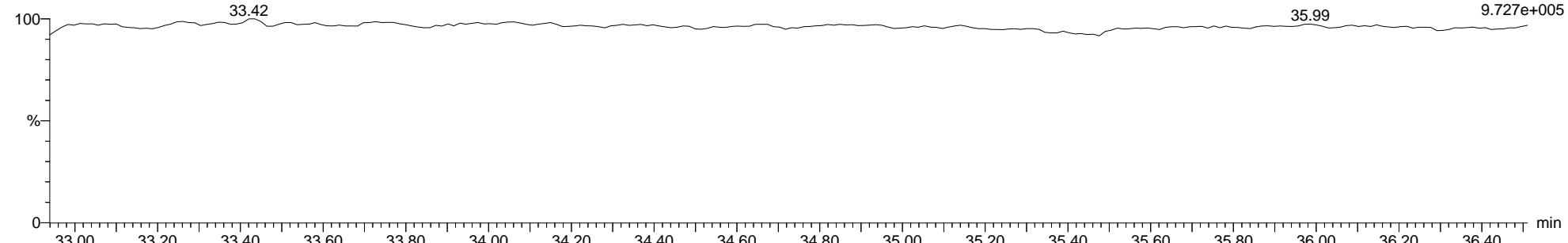
29.36  
29.57  
29.83  
29.97  
30.07  
30.32  
30.47  
30.57  
30.76  
30.84  
31.09  
31.15  
31.22  
31.52  
31.63  
31.74  
31.95  
32.10  
32.22  
32.42  
32.50  
32.66F6:Voltage SIR,EI+  
454.9728  
8.577e+005

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C23, Date: 08-Dec-2015, Time: 05:40:13, ID: WG2225462-1, Description: MB, Vial: Tray1:18

**\* PCB-209**5-151207C23 Smooth(Mn,1x1)  
MB WG2225462-15-151207C23 Smooth(Mn,1x1)  
MB WG2225462-15-151207C23 Smooth(Mn,1x1)  
MB WG2225462-1

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

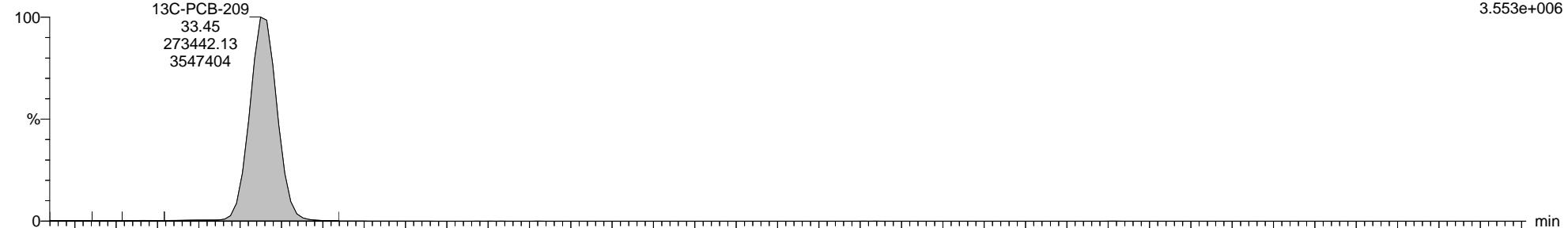
Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C23, Date: 08-Dec-2015, Time: 05:40:13, ID: WG2225462-1, Description: MB, Vial: Tray1:18

### 13C-PCB-209

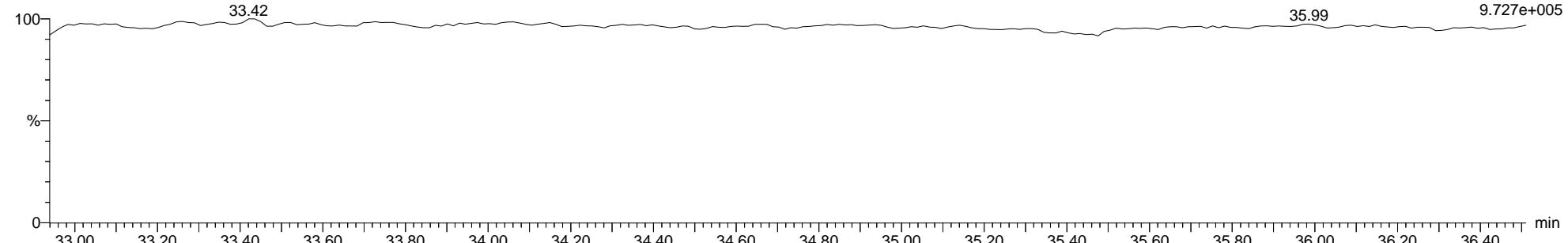
5-151207C23 Smooth(Mn,1x1)  
MB WG2225462-1



5-151207C23 Smooth(Mn,1x1)  
MB WG2225462-1



5-151207C23 Smooth(Mn,1x1)  
MB WG2225462-1



Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

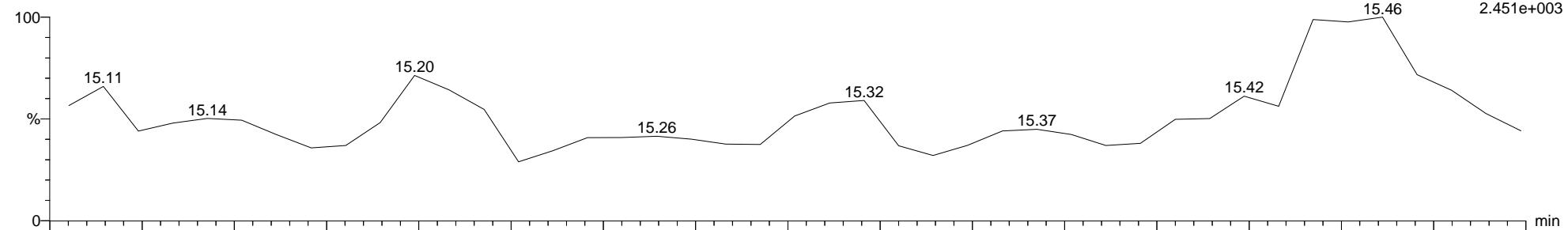
Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C26, Date: 08-Dec-2015, Time: 07:38:47, ID: L1685414-1, Description: RE, Vial: Tray1:21

**\* PCB-34**

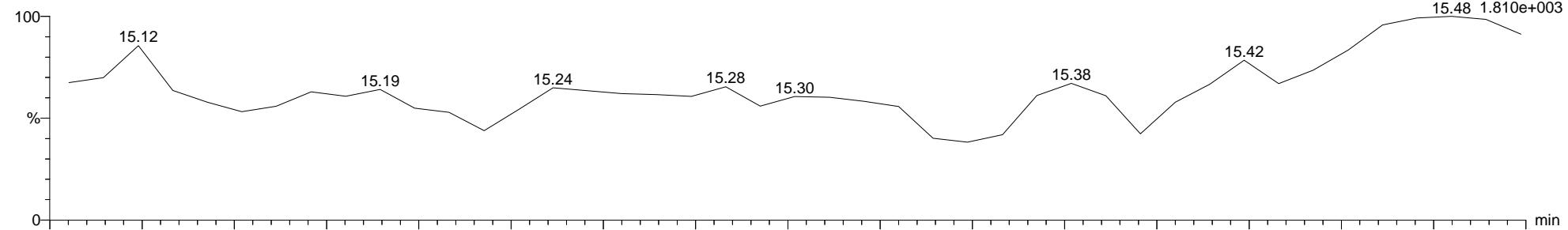
5-151207C26 Smooth(Mn,1x1)

RE L1685414-1



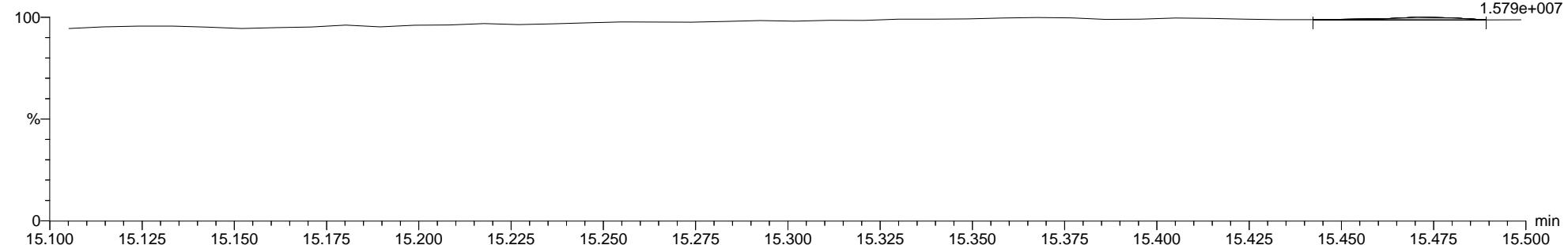
5-151207C26 Smooth(Mn,1x1)

RE L1685414-1



5-151207C26 Smooth(Mn,1x1)

RE L1685414-1



Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

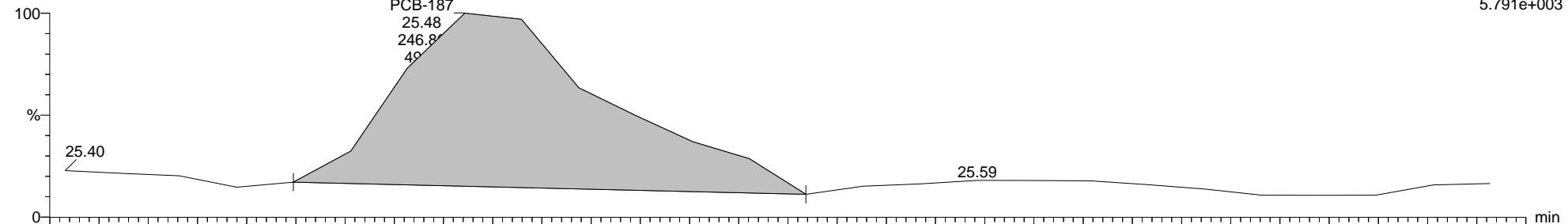
Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C26, Date: 08-Dec-2015, Time: 07:38:47, ID: L1685414-1, Description: RE, Vial: Tray1:21

**PCB-187**

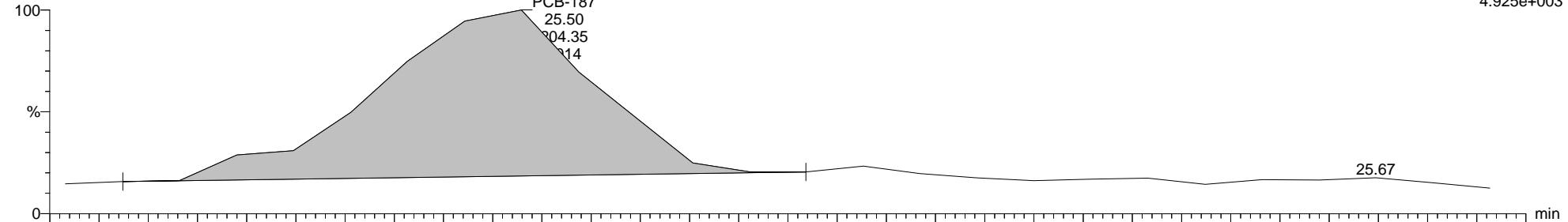
5-151207C26 Smooth(Mn,1x1)

RE L1685414-1

F5:Voltage SIR,EI+  
393.8025  
5.791e+003

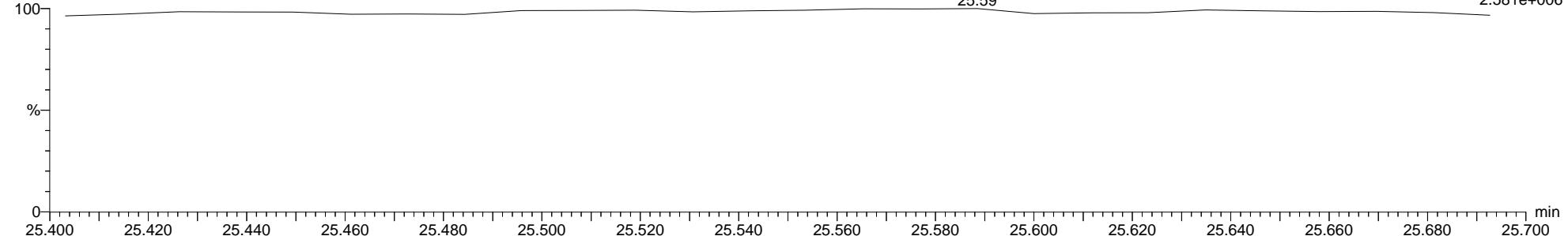
5-151207C26 Smooth(Mn,1x1)

RE L1685414-1

F5:Voltage SIR,EI+  
395.7995  
4.925e+003

5-151207C26 Smooth(Mn,1x1)

RE L1685414-1

F5:Voltage SIR,EI+  
354.9792  
2.581e+006

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C26, Date: 08-Dec-2015, Time: 07:38:47, ID: L1685414-1, Description: RE, Vial: Tray1:21

**\* PCB-1**

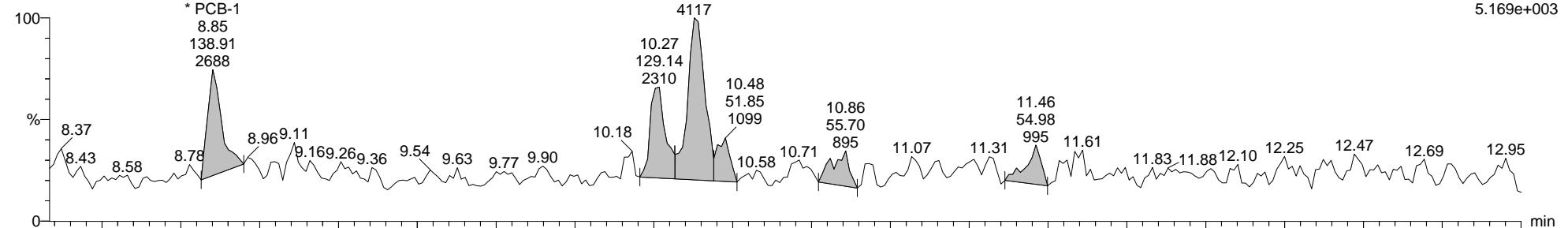
5-151207C26 Smooth(Mn,1x1)

RE L1685414-1

F1:Voltage SIR, EI+

188.0393

5.169e+003



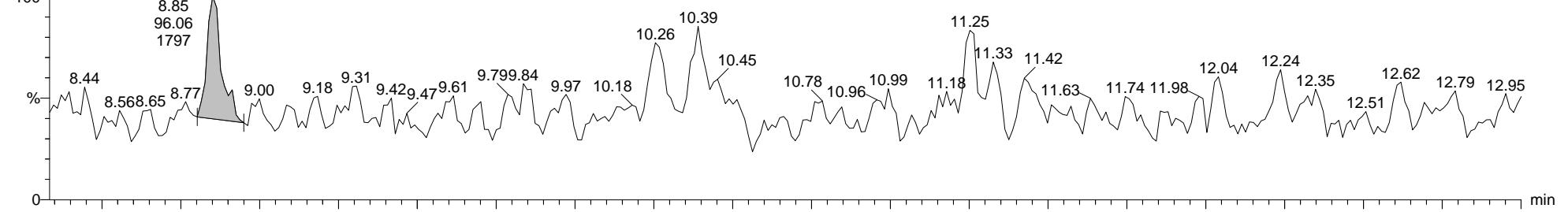
5-151207C26 Smooth(Mn,1x1)

RE L1685414-1

F1:Voltage SIR, EI+

190.0363

2.986e+003



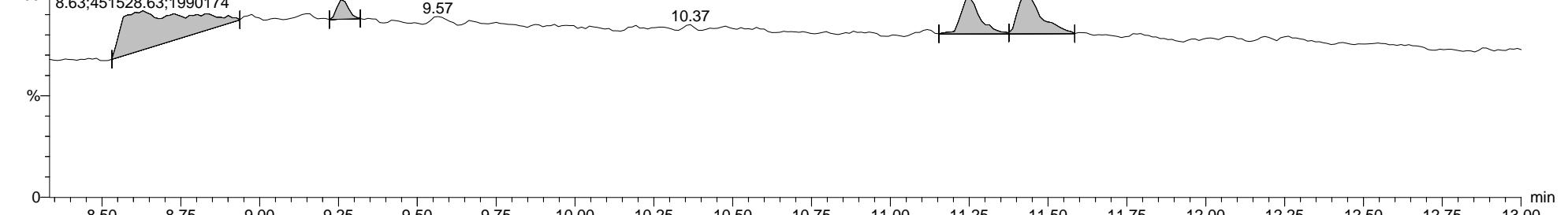
5-151207C26 Smooth(Mn,1x1)

RE L1685414-1

F1:Voltage SIR, EI+

218.9856

1.040e+007



Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

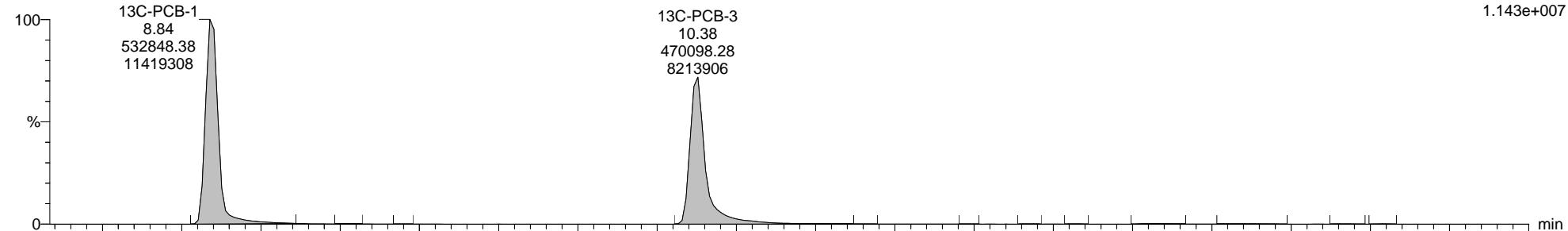
Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C26, Date: 08-Dec-2015, Time: 07:38:47, ID: L1685414-1, Description: RE, Vial: Tray1:21

**13C-PCB-1**

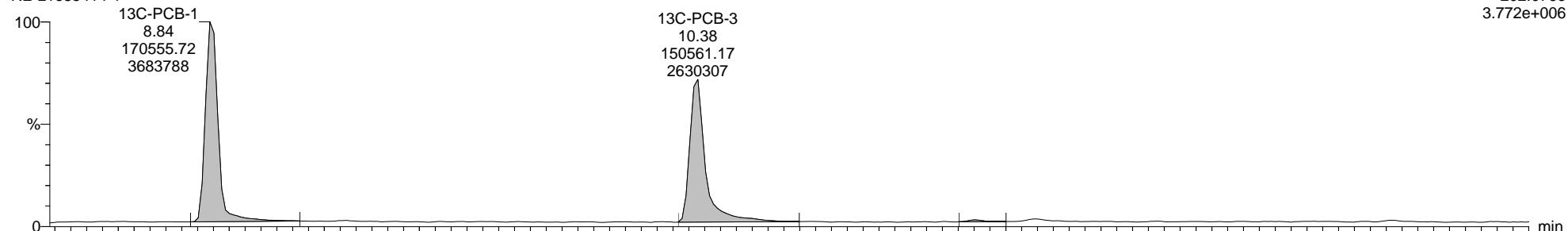
5-151207C26 Smooth(Mn,1x1)

RE L1685414-1



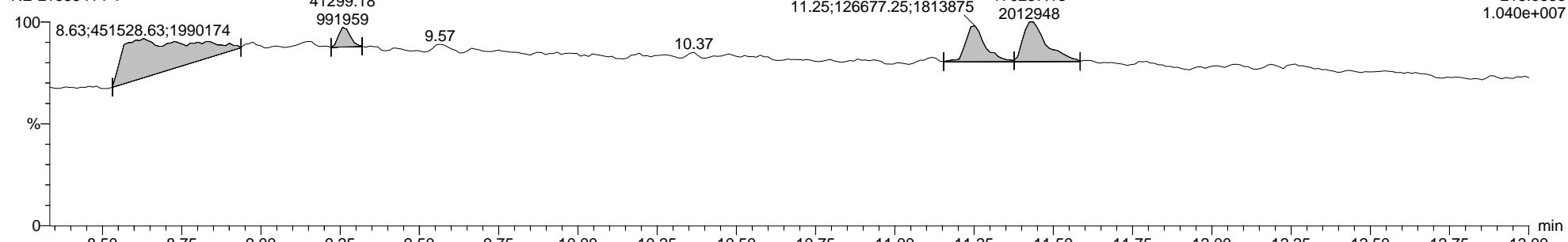
5-151207C26 Smooth(Mn,1x1)

RE L1685414-1



5-151207C26 Smooth(Mn,1x1)

RE L1685414-1

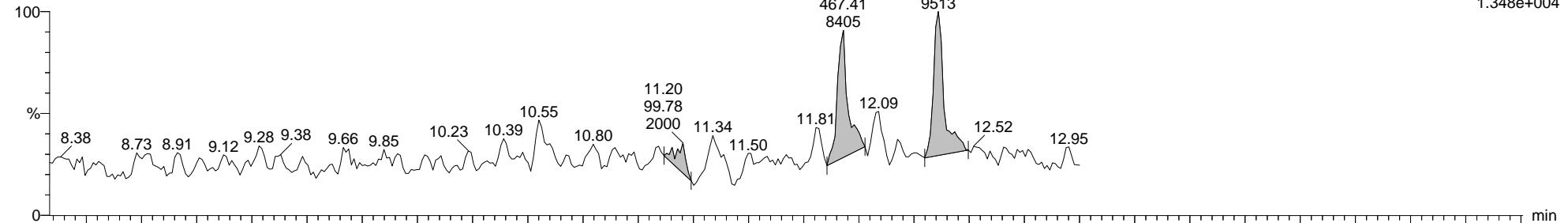
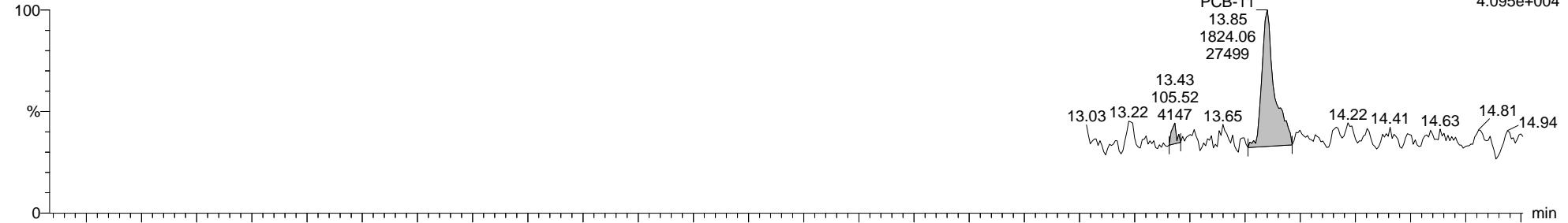
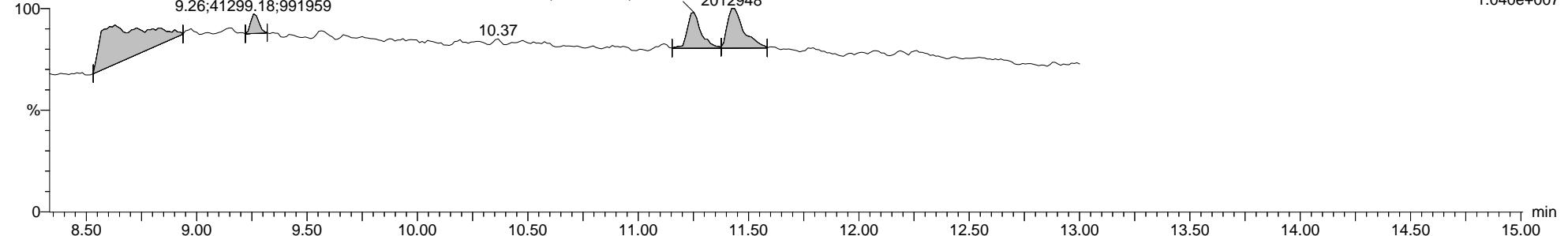


Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C26, Date: 08-Dec-2015, Time: 07:38:47, ID: L1685414-1, Description: RE, Vial: Tray1:21

**\* PCB-4**5-151207C26 Smooth(Mn,1x1)  
RE L1685414-1F1:Voltage SIR,EI+  
222.0003  
1.348e+0045-151207C26 Smooth(Mn,1x1)  
RE L1685414-1F2:Voltage SIR,EI+  
223.9974  
4.095e+0045-151207C26 Smooth(Mn,1x1)  
RE L1685414-1F1:Voltage SIR,EI+  
218.9856  
1.040e+007

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

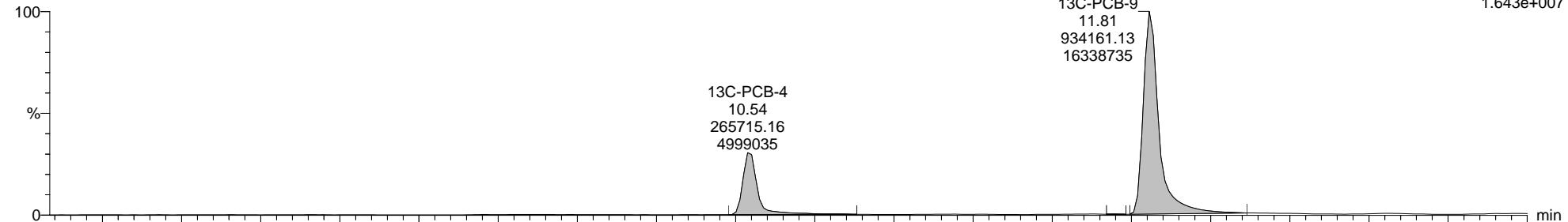
Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C26, Date: 08-Dec-2015, Time: 07:38:47, ID: L1685414-1, Description: RE, Vial: Tray1:21

**13C-PCB-4**

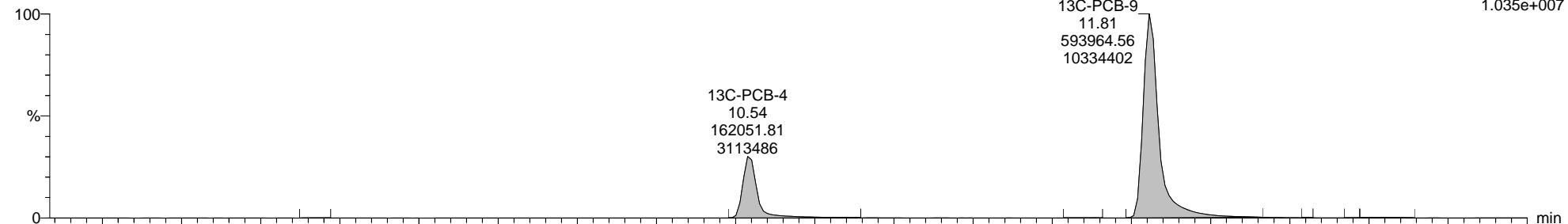
5-151207C26 Smooth(Mn,1x1)

RE L1685414-1



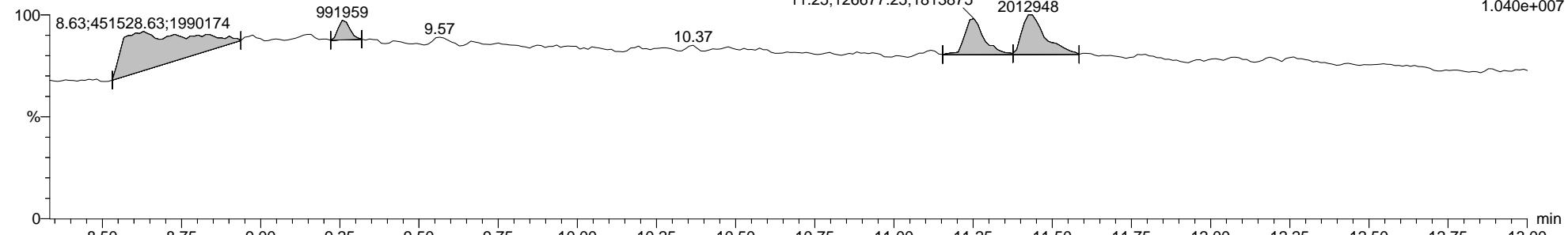
5-151207C26 Smooth(Mn,1x1)

RE L1685414-1



5-151207C26 Smooth(Mn,1x1)

RE L1685414-1



Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

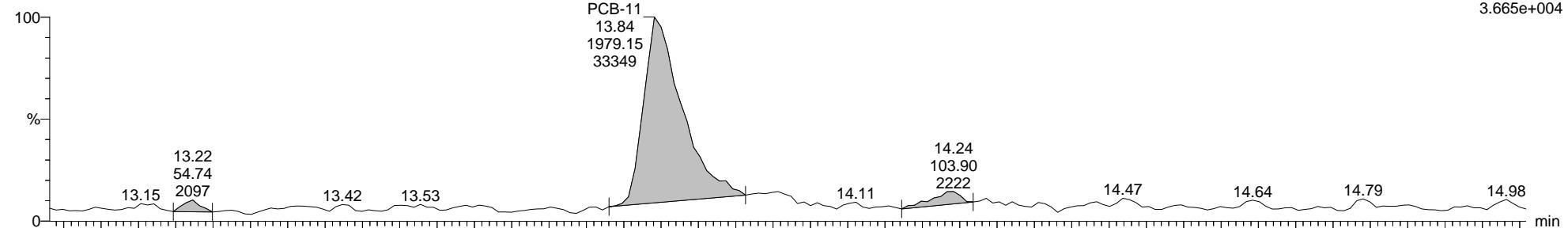
Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C26, Date: 08-Dec-2015, Time: 07:38:47, ID: L1685414-1, Description: RE, Vial: Tray1:21

**PCB-15**

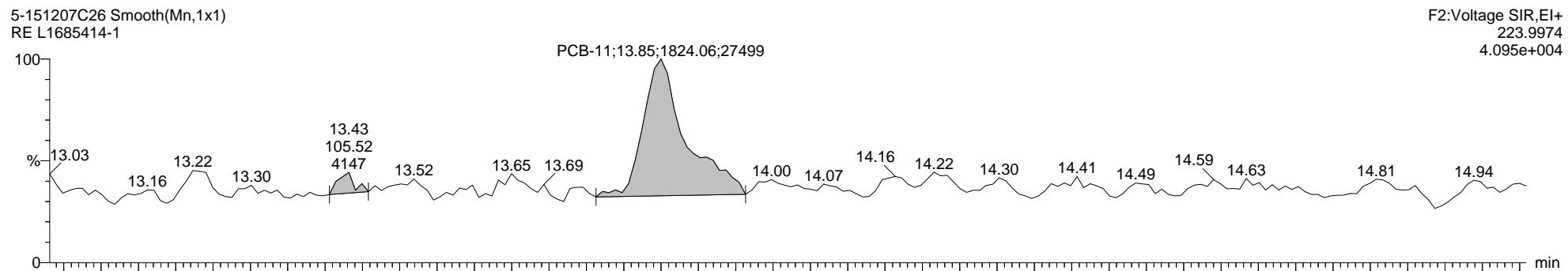
5-151207C26 Smooth(Mn,1x1)

RE L1685414-1



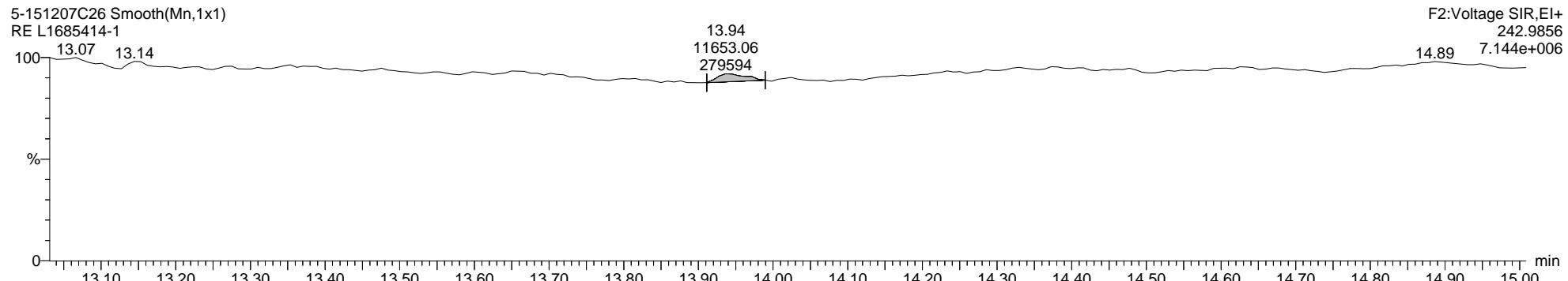
5-151207C26 Smooth(Mn,1x1)

RE L1685414-1



5-151207C26 Smooth(Mn,1x1)

RE L1685414-1



Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C26, Date: 08-Dec-2015, Time: 07:38:47, ID: L1685414-1, Description: RE, Vial: Tray1:21

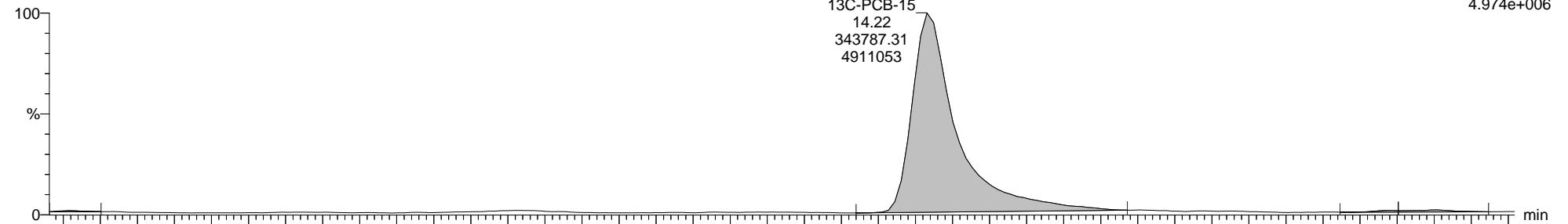
**13C-PCB-15**

5-151207C26 Smooth(Mn,1x1)

RE L1685414-1

F2:Voltage SIR,EI+

234.0406

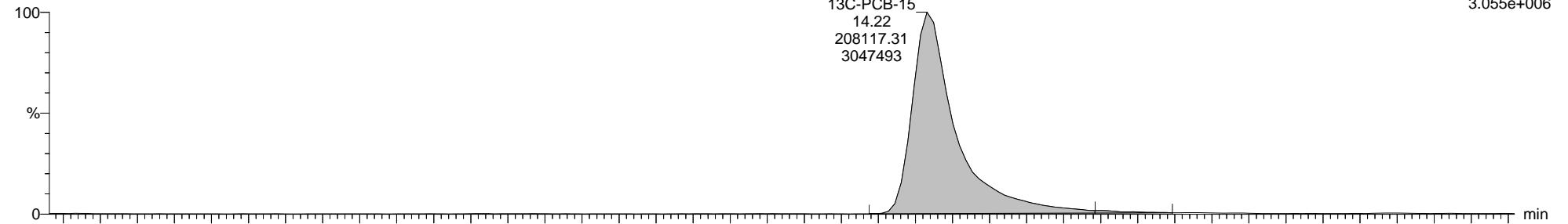


5-151207C26 Smooth(Mn,1x1)

RE L1685414-1

F2:Voltage SIR,EI+

236.0376

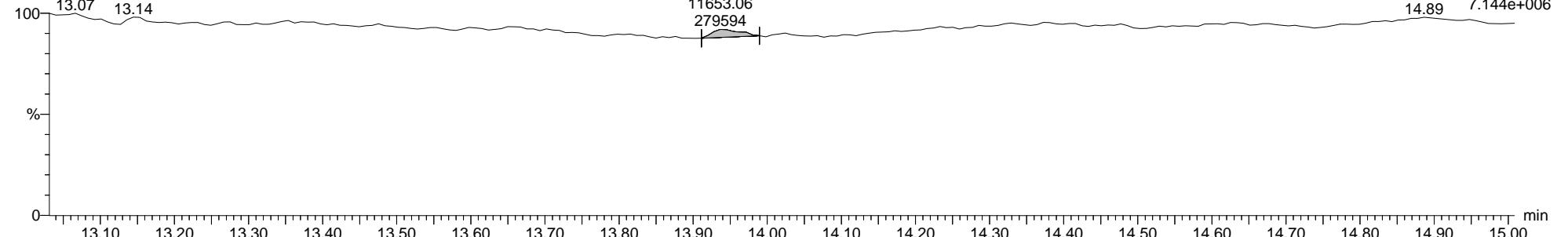


5-151207C26 Smooth(Mn,1x1)

RE L1685414-1

F2:Voltage SIR,EI+

242.9856



Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

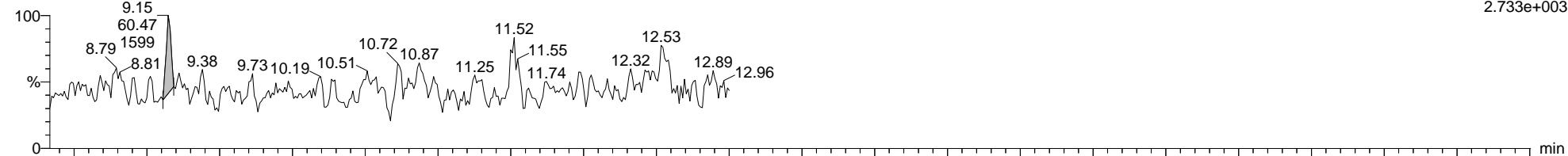
Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C26, Date: 08-Dec-2015, Time: 07:38:47, ID: L1685414-1, Description: RE, Vial: Tray1:21

**\* PCB-19**

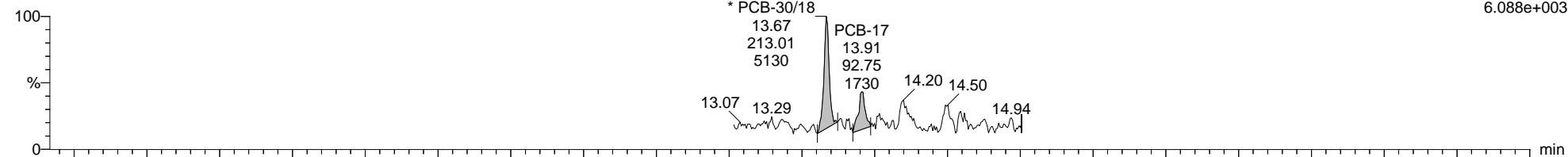
5-151207C26 Smooth(Mn,1x1)

RE L1685414-1



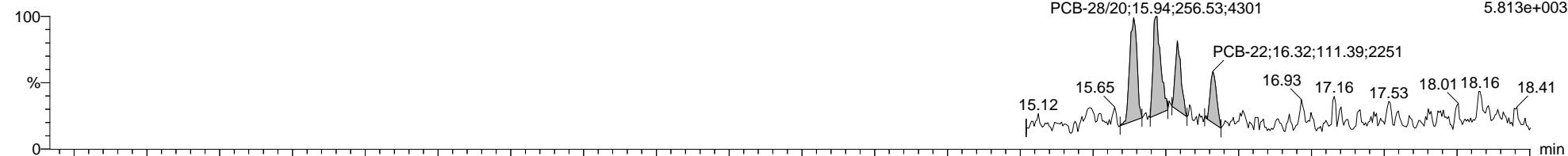
5-151207C26 Smooth(Mn,1x1)

RE L1685414-1



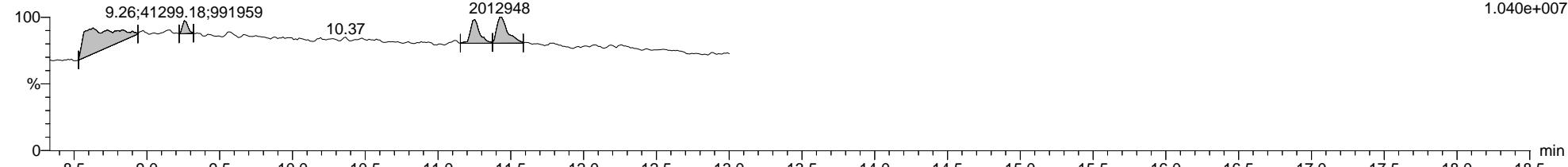
5-151207C26 Smooth(Mn,1x1)

RE L1685414-1



5-151207C26 Smooth(Mn,1x1)

RE L1685414-1



Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

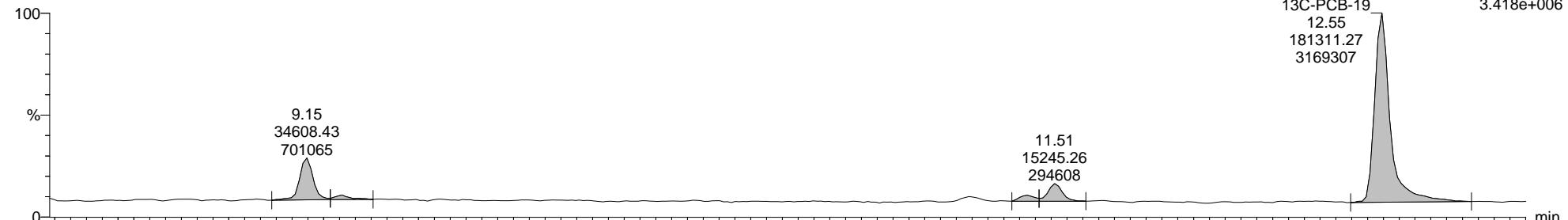
Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C26, Date: 08-Dec-2015, Time: 07:38:47, ID: L1685414-1, Description: RE, Vial: Tray1:21

**13C-PCB-19**

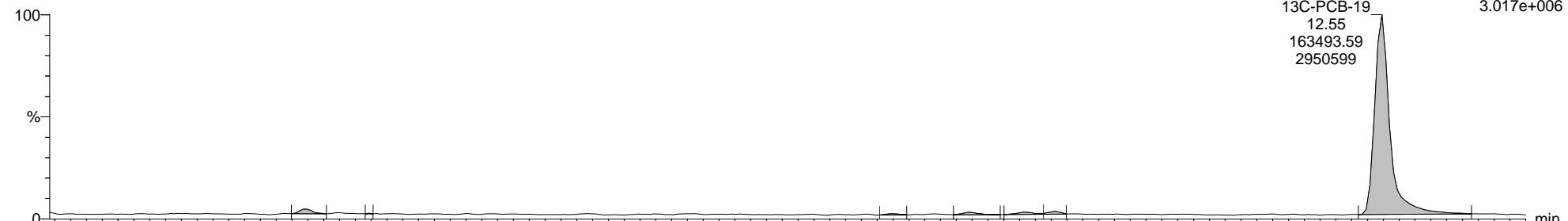
5-151207C26 Smooth(Mn,1x1)

RE L1685414-1



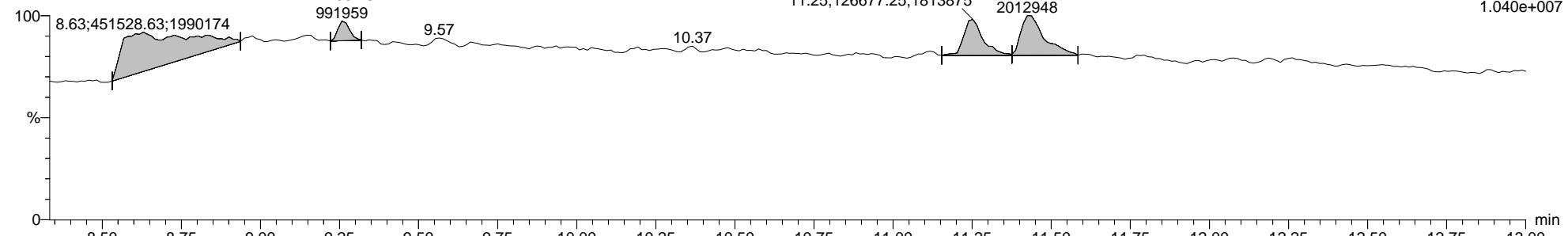
5-151207C26 Smooth(Mn,1x1)

RE L1685414-1



5-151207C26 Smooth(Mn,1x1)

RE L1685414-1

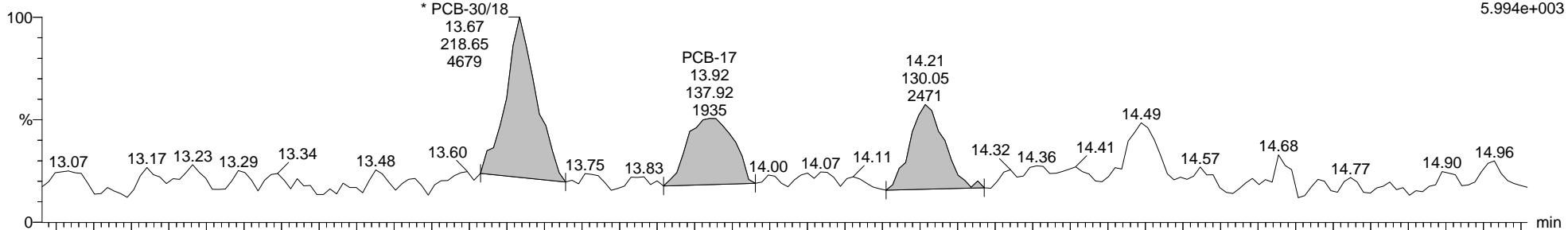
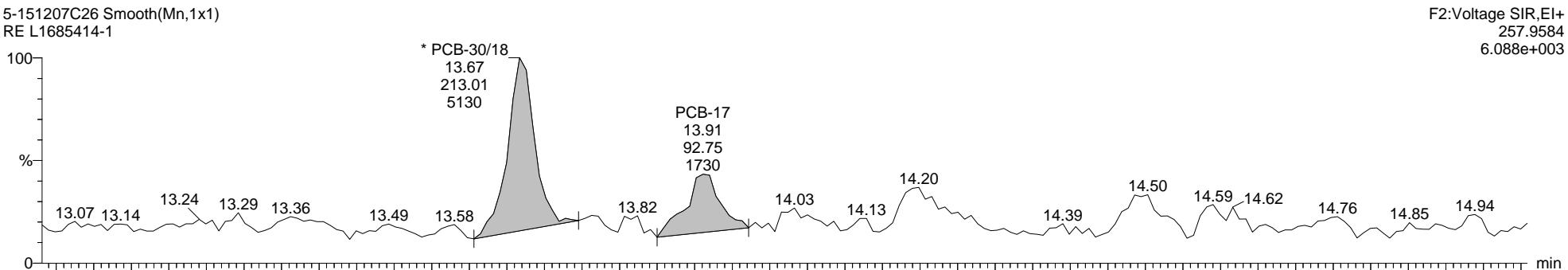
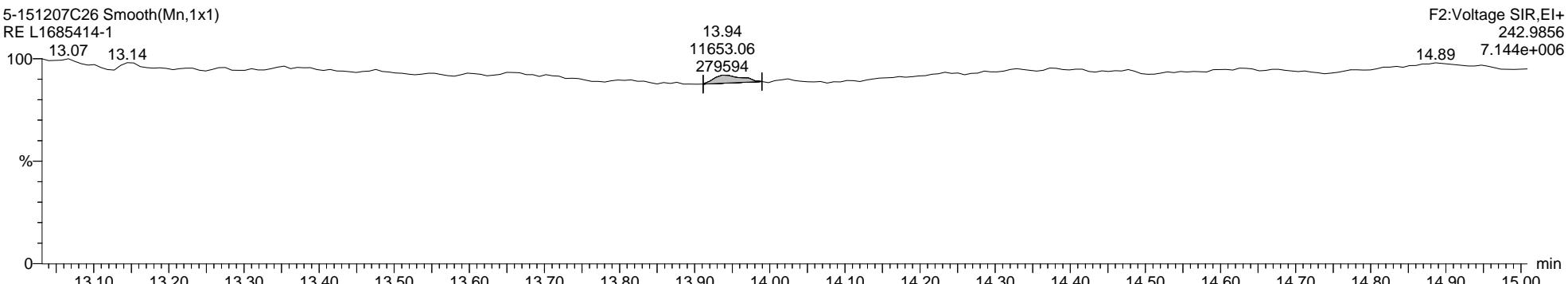


Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C26, Date: 08-Dec-2015, Time: 07:38:47, ID: L1685414-1, Description: RE, Vial: Tray1:21

**\* PCB-30/18**5-151207C26 Smooth(Mn,1x1)  
RE L1685414-15-151207C26 Smooth(Mn,1x1)  
RE L1685414-15-151207C26 Smooth(Mn,1x1)  
RE L1685414-1

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

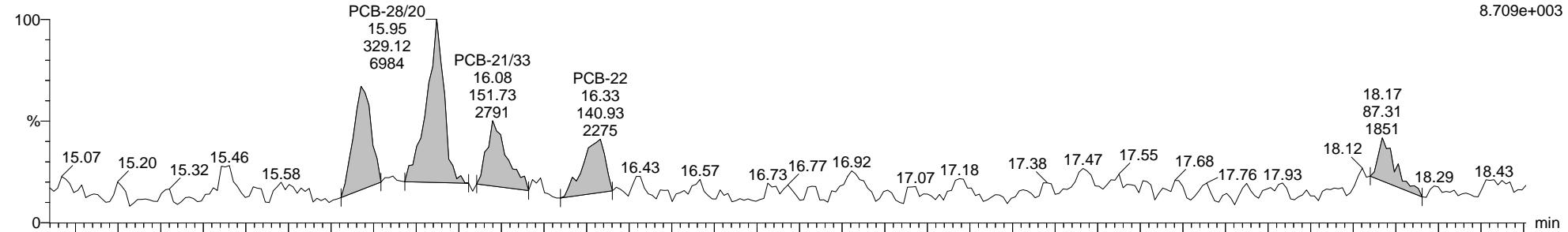
Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C26, Date: 08-Dec-2015, Time: 07:38:47, ID: L1685414-1, Description: RE, Vial: Tray1:21

**PCB-37**

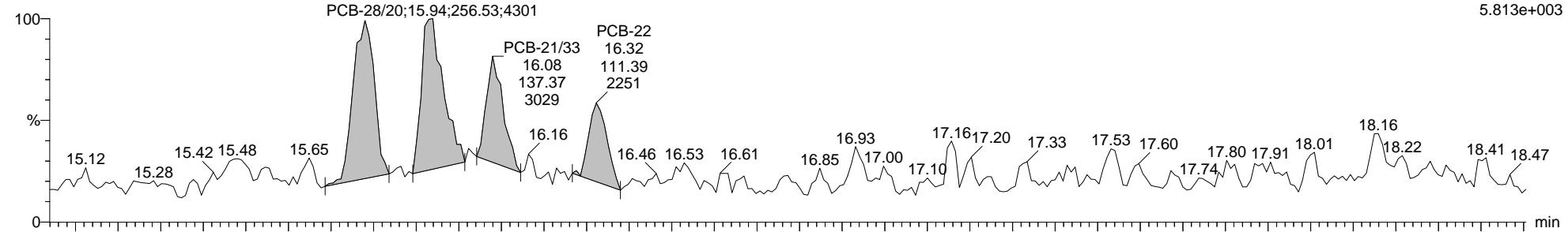
5-151207C26 Smooth(Mn,1x1)

RE L1685414-1



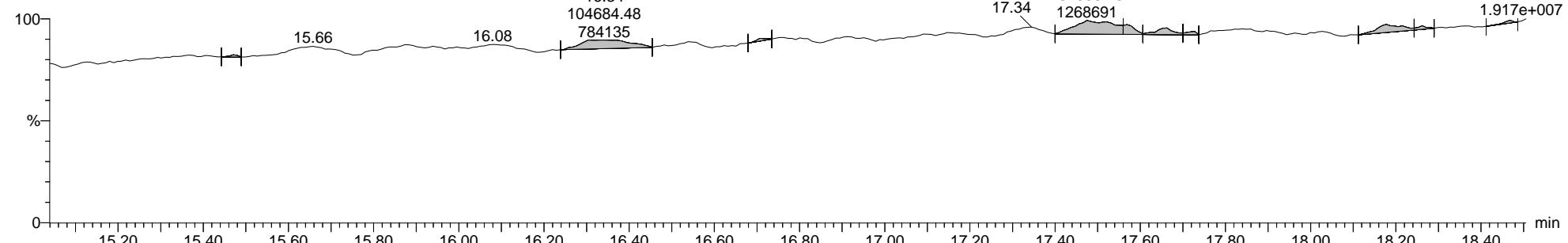
5-151207C26 Smooth(Mn,1x1)

RE L1685414-1



5-151207C26 Smooth(Mn,1x1)

RE L1685414-1



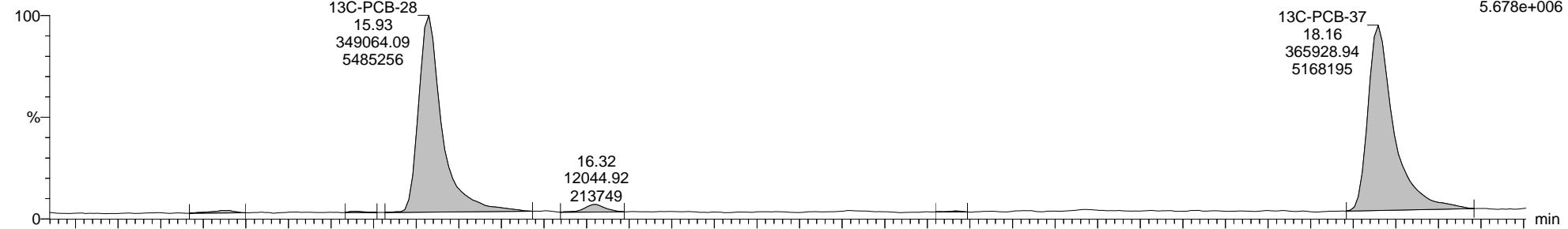
Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time  
Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

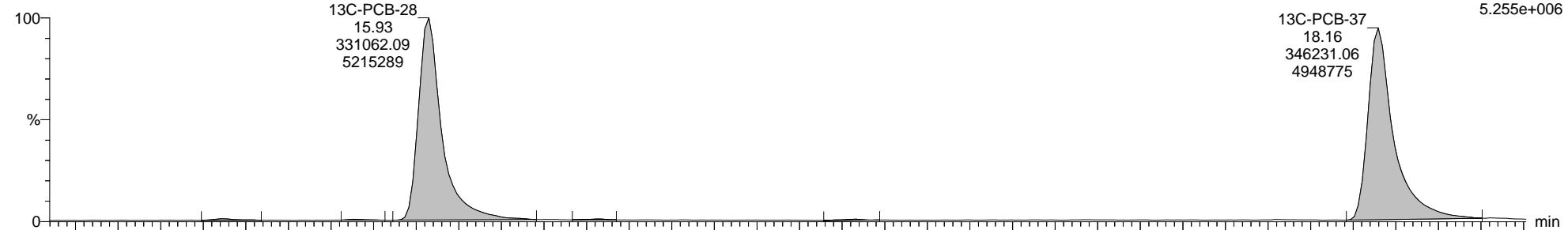
Name: 5-151207C26, Date: 08-Dec-2015, Time: 07:38:47, ID: L1685414-1, Description: RE, Vial: Tray1:21

13C-PCB-37

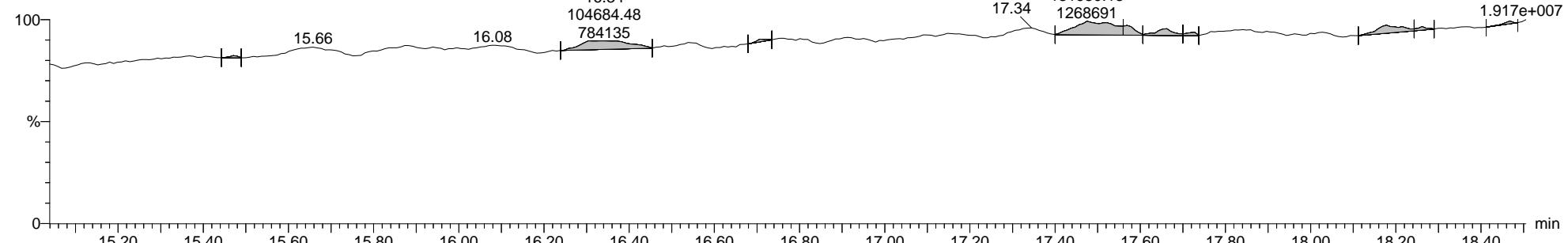
5-151207C26 Smooth(Mn,1x1)  
RE L1685414-1



5-151207C26 Smooth(Mn,1x1)  
RE L1685414-1



5-151207C26 Smooth(Mn,1x1)  
RE L1685414-1



Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C26, Date: 08-Dec-2015, Time: 07:38:47, ID: L1685414-1, Description: RE, Vial: Tray1:21

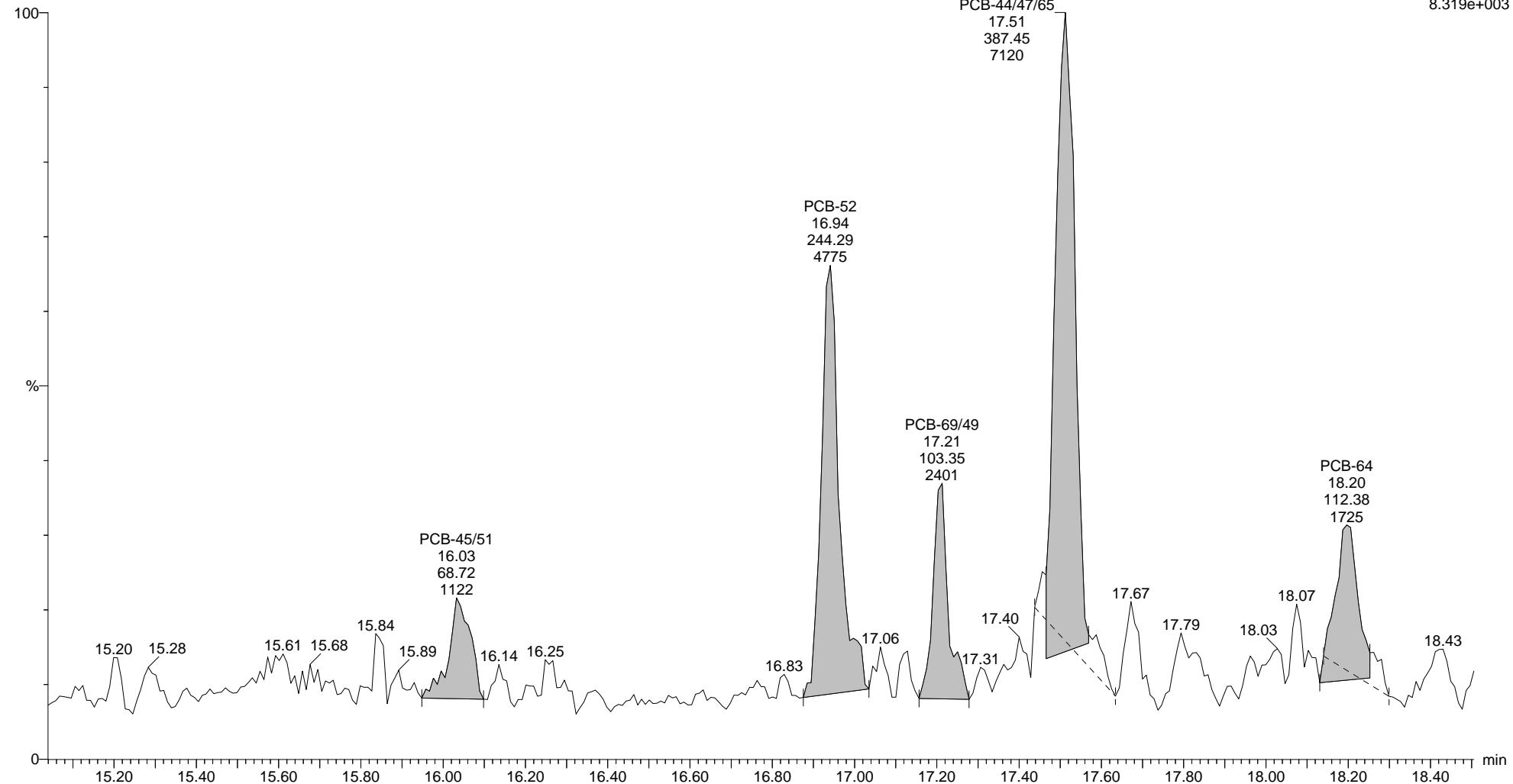
**\* PCB-54**

5-151207C26 Smooth(Mn,1x1)

RE L1685414-1

F3:Voltage SIR,EI+

289.9224



Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

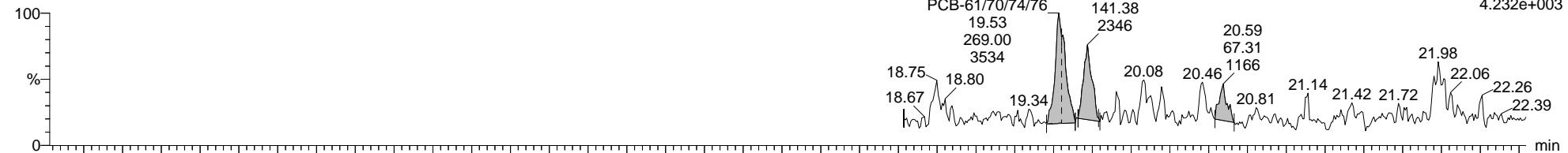
Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C26, Date: 08-Dec-2015, Time: 07:38:47, ID: L1685414-1, Description: RE, Vial: Tray1:21

**\* PCB-54**

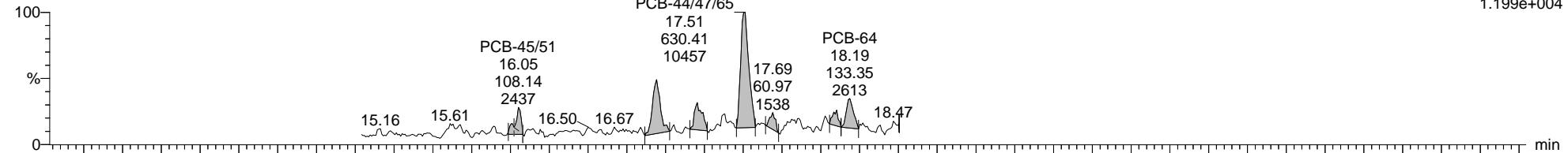
5-151207C26 Smooth(Mn,1x1)

RE L1685414-1



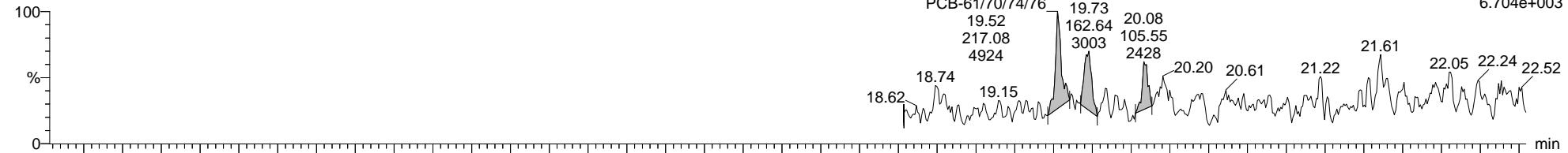
5-151207C26 Smooth(Mn,1x1)

RE L1685414-1



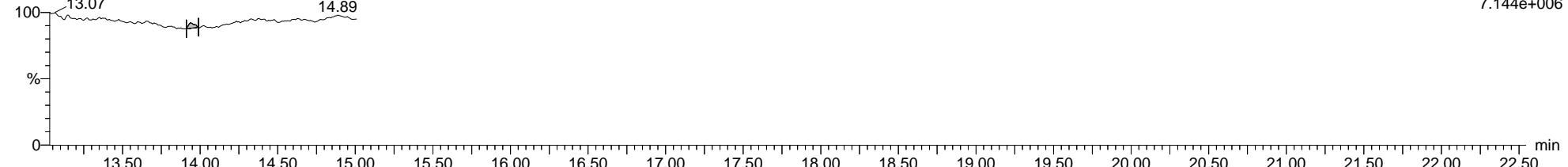
5-151207C26 Smooth(Mn,1x1)

RE L1685414-1



5-151207C26 Smooth(Mn,1x1)

RE L1685414-1



Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

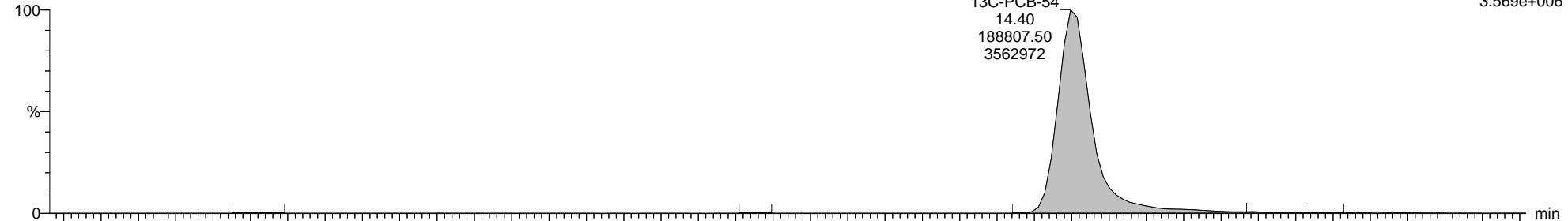
Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C26, Date: 08-Dec-2015, Time: 07:38:47, ID: L1685414-1, Description: RE, Vial: Tray1:21

**13C-PCB-54**

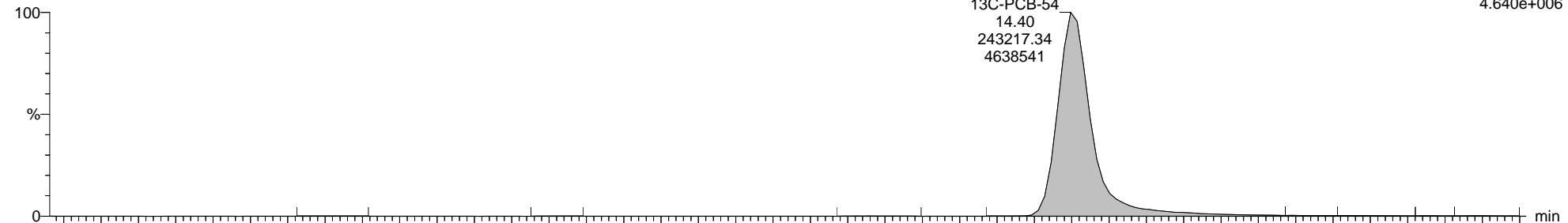
5-151207C26 Smooth(Mn,1x1)

RE L1685414-1



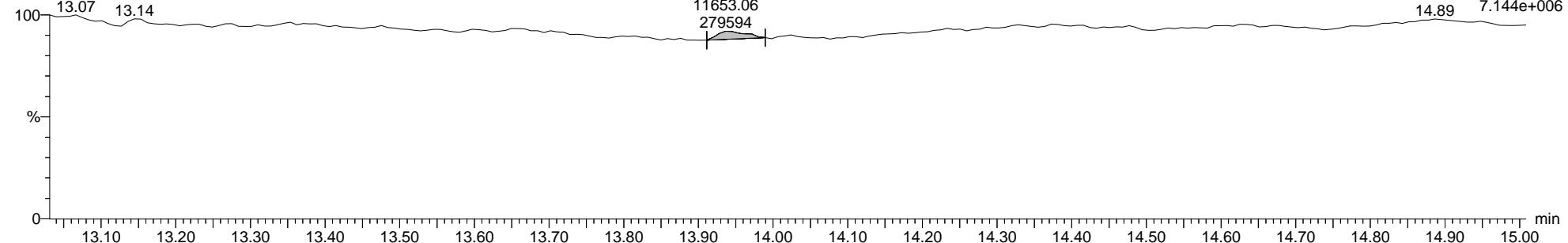
5-151207C26 Smooth(Mn,1x1)

RE L1685414-1



5-151207C26 Smooth(Mn,1x1)

RE L1685414-1



Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

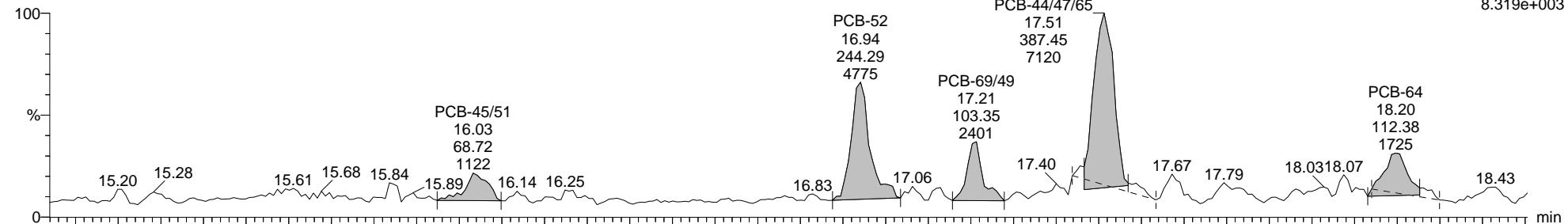
Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C26, Date: 08-Dec-2015, Time: 07:38:47, ID: L1685414-1, Description: RE, Vial: Tray1:21

**\* PCB-50/53**

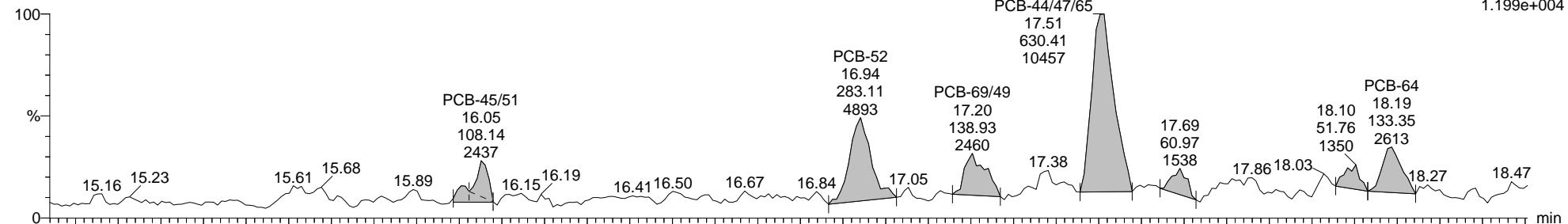
5-151207C26 Smooth(Mn,1x1)

RE L1685414-1



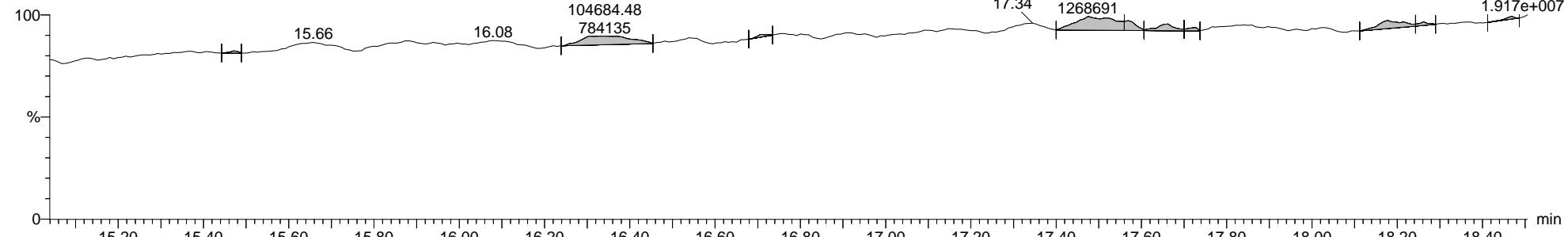
5-151207C26 Smooth(Mn,1x1)

RE L1685414-1



5-151207C26 Smooth(Mn,1x1)

RE L1685414-1



Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

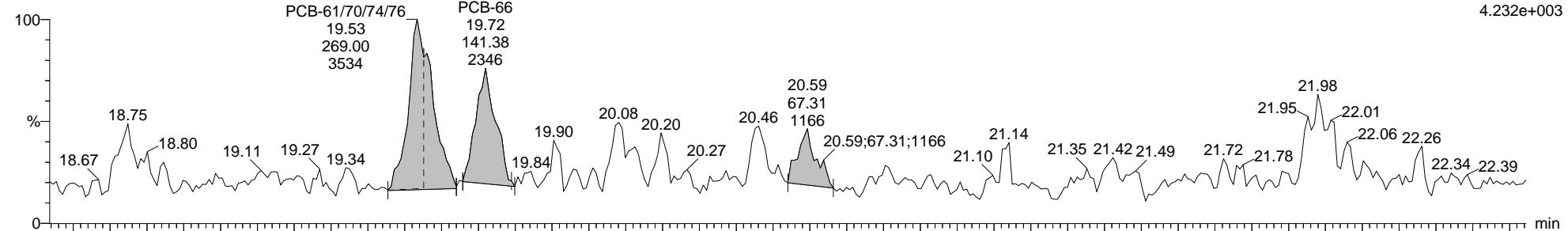
Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C26, Date: 08-Dec-2015, Time: 07:38:47, ID: L1685414-1, Description: RE, Vial: Tray1:21

**PCB-81**

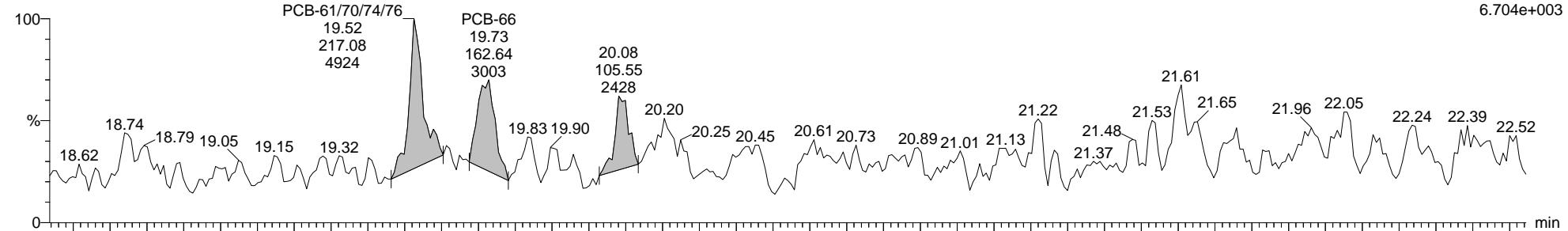
5-151207C26 Smooth(Mn,1x1)

RE L1685414-1



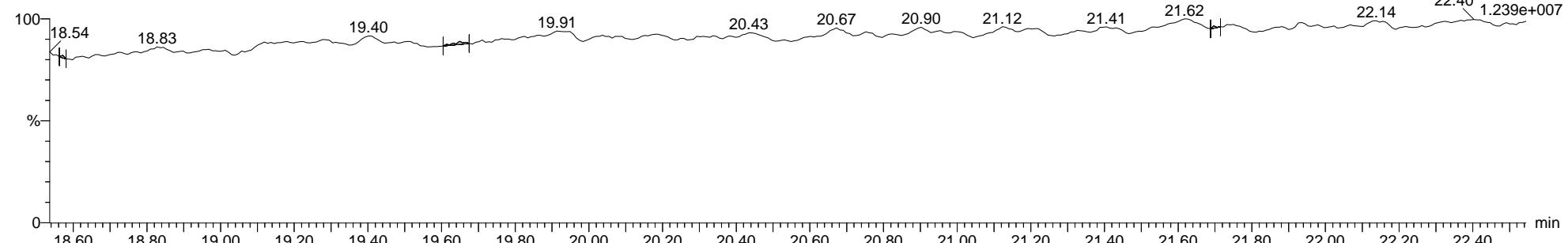
5-151207C26 Smooth(Mn,1x1)

RE L1685414-1



5-151207C26 Smooth(Mn,1x1)

RE L1685414-1



Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

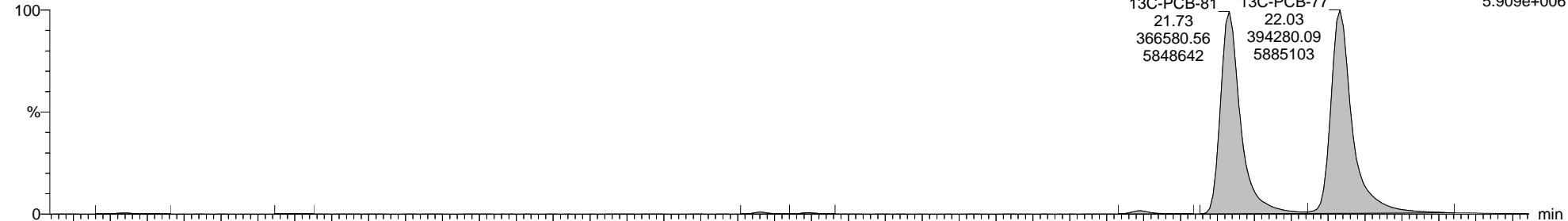
Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C26, Date: 08-Dec-2015, Time: 07:38:47, ID: L1685414-1, Description: RE, Vial: Tray1:21

**13C-PCB-81**

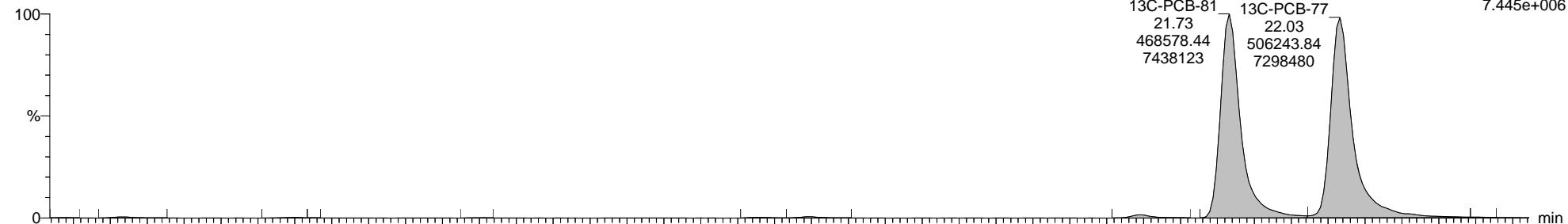
5-151207C26 Smooth(Mn,1x1)

RE L1685414-1



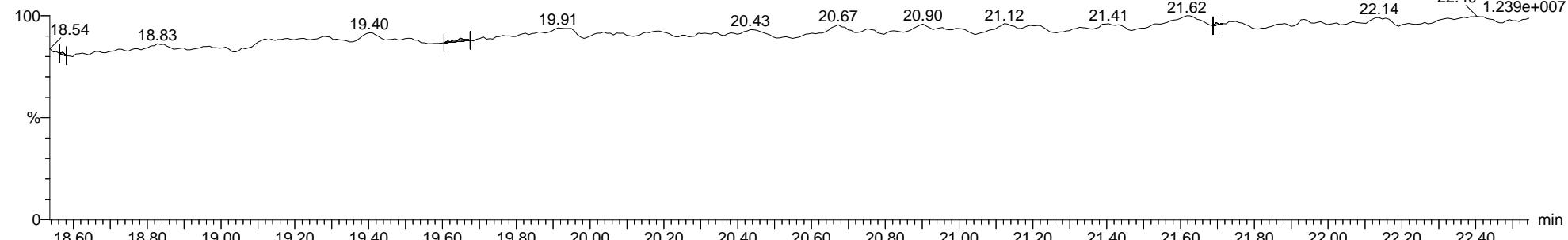
5-151207C26 Smooth(Mn,1x1)

RE L1685414-1



5-151207C26 Smooth(Mn,1x1)

RE L1685414-1



Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

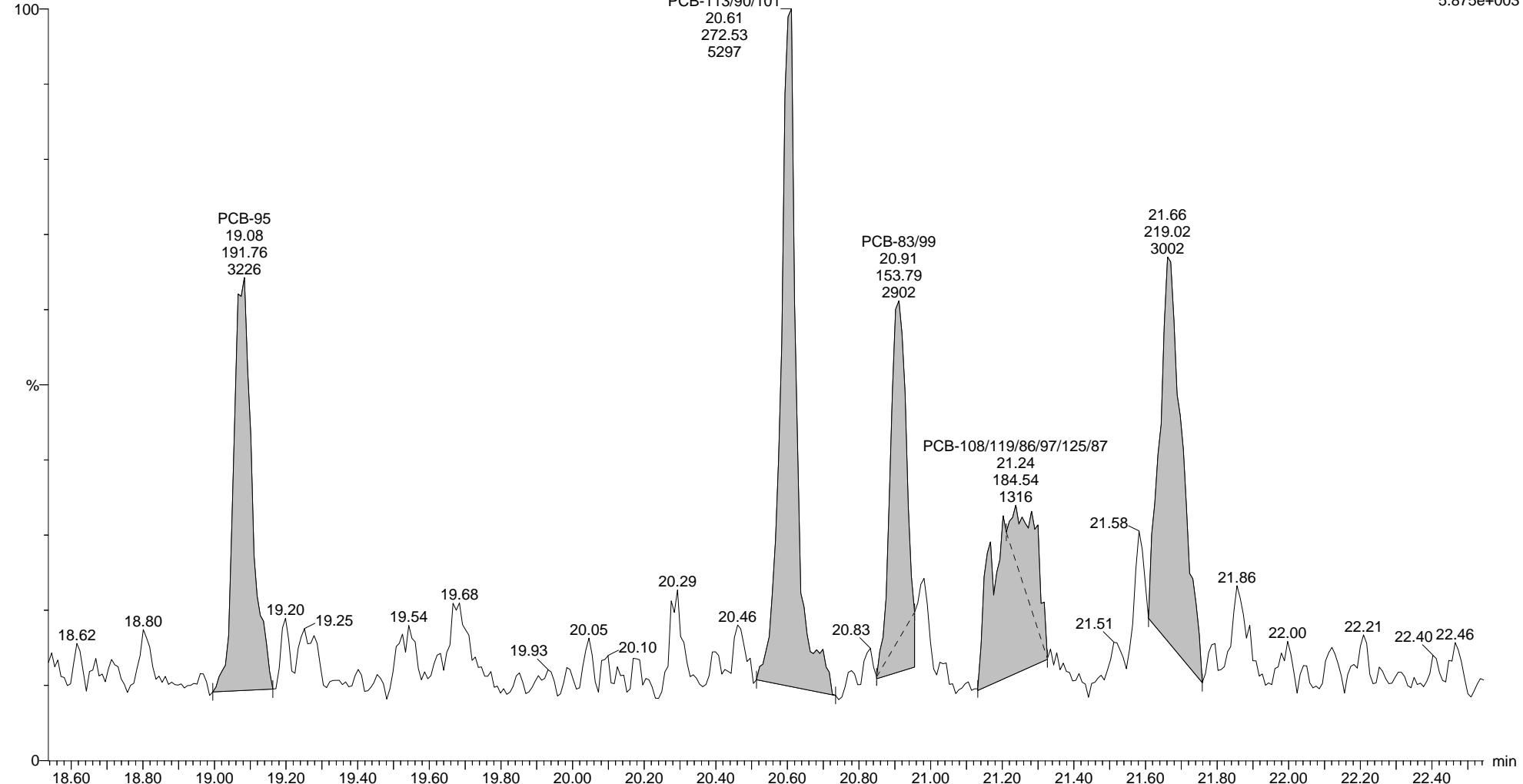
Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C26, Date: 08-Dec-2015, Time: 07:38:47, ID: L1685414-1, Description: RE, Vial: Tray1:21

**\* PCB-104**

5-151207C26 Smooth(Mn,1x1)

RE L1685414-1

F4:Voltage SIR,ELI+  
325.8804  
5.875e+003

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

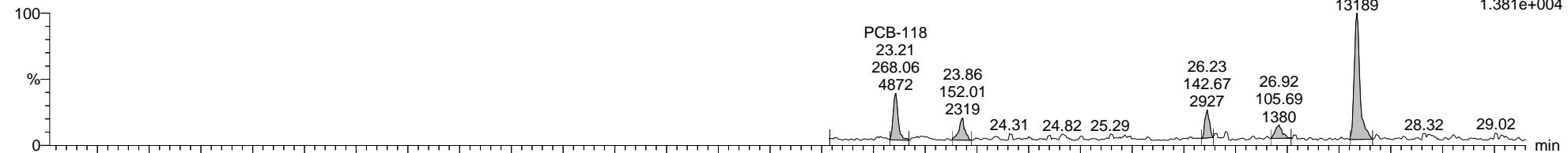
Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C26, Date: 08-Dec-2015, Time: 07:38:47, ID: L1685414-1, Description: RE, Vial: Tray1:21

**\* PCB-104**

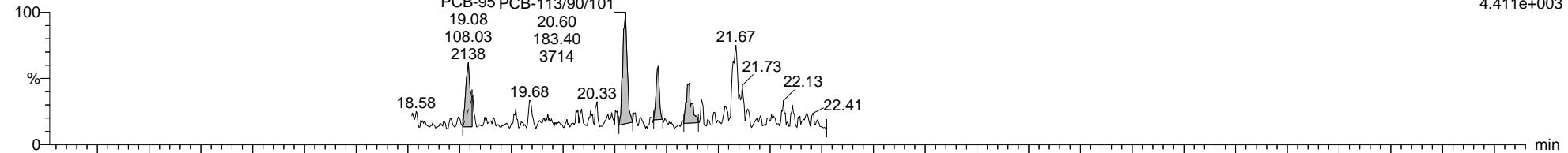
5-151207C26 Smooth(Mn,1x1)

RE L1685414-1



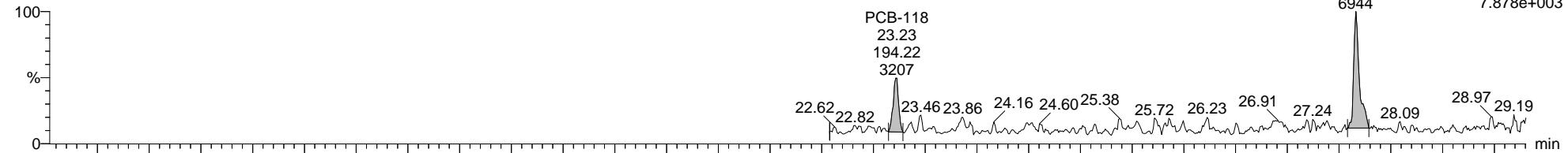
5-151207C26 Smooth(Mn,1x1)

RE L1685414-1



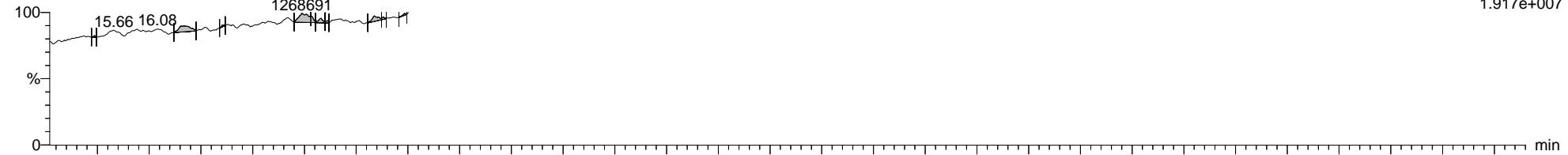
5-151207C26 Smooth(Mn,1x1)

RE L1685414-1



5-151207C26 Smooth(Mn,1x1)

RE L1685414-1

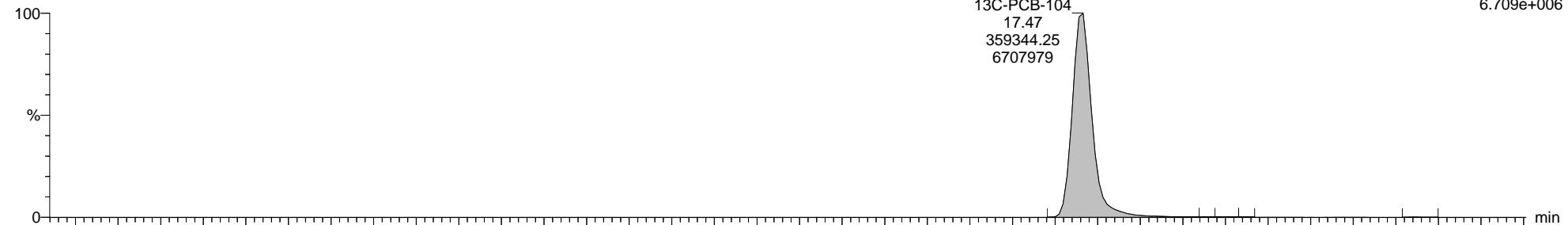
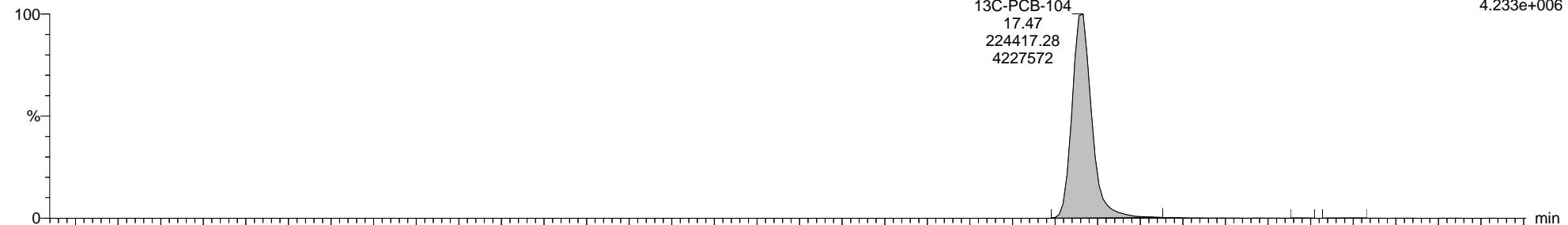
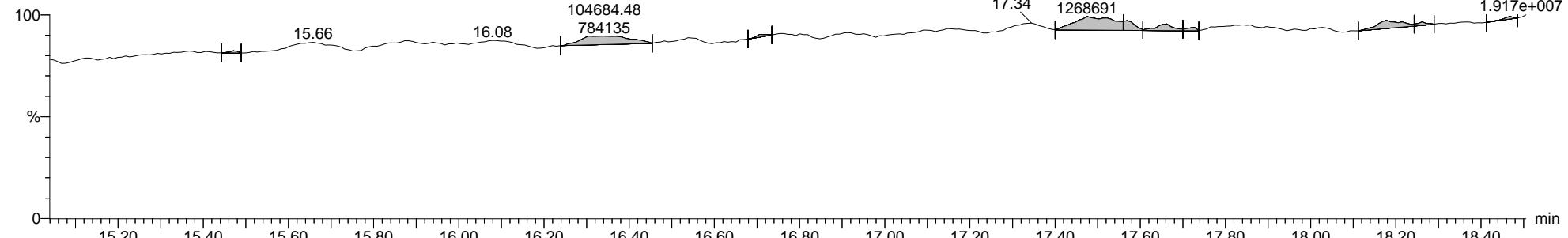


Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C26, Date: 08-Dec-2015, Time: 07:38:47, ID: L1685414-1, Description: RE, Vial: Tray1:21

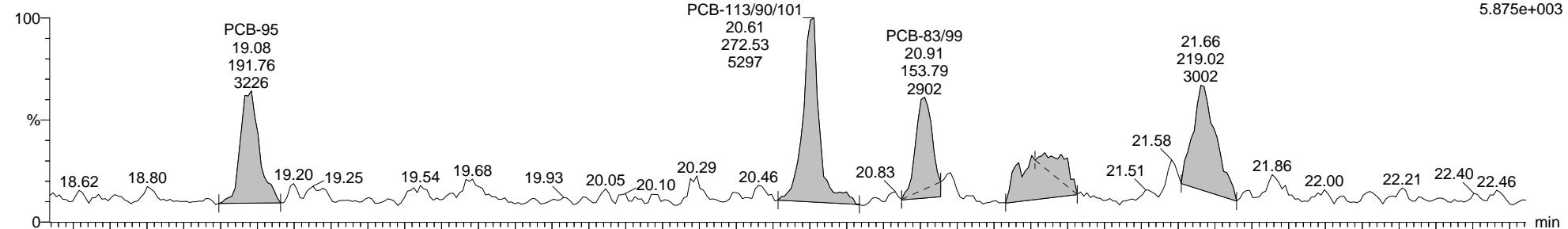
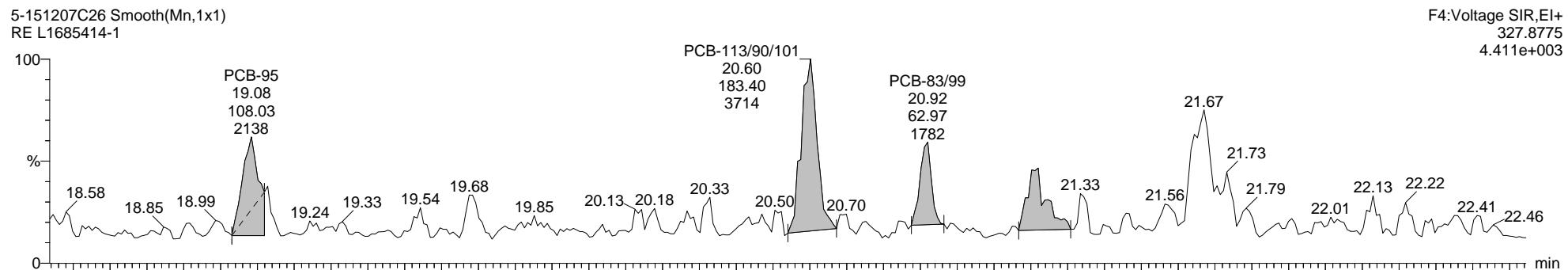
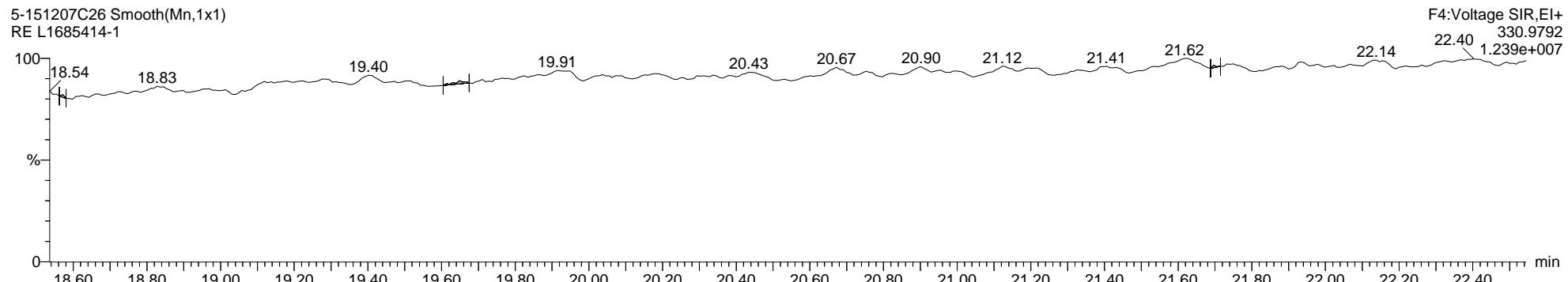
**13C-PCB-104**5-151207C26 Smooth(Mn,1x1)  
RE L1685414-15-151207C26 Smooth(Mn,1x1)  
RE L1685414-15-151207C26 Smooth(Mn,1x1)  
RE L1685414-1

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C26, Date: 08-Dec-2015, Time: 07:38:47, ID: L1685414-1, Description: RE, Vial: Tray1:21

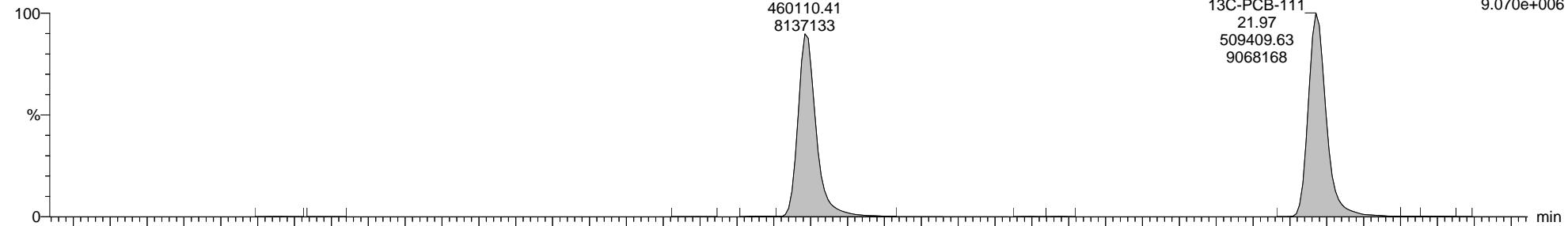
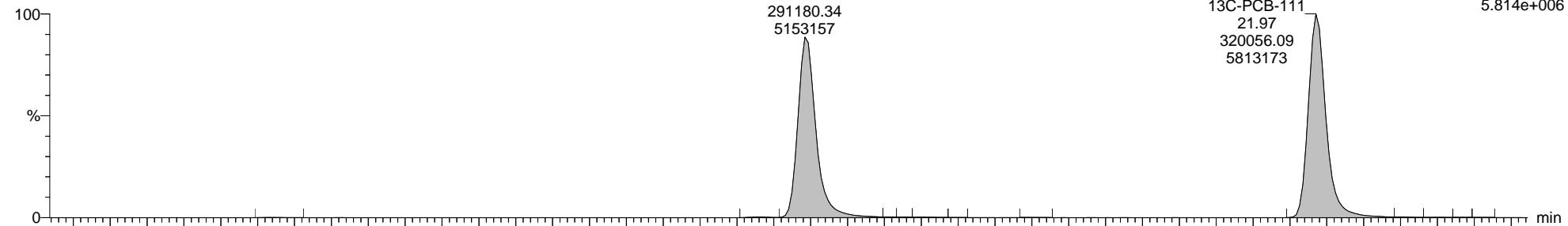
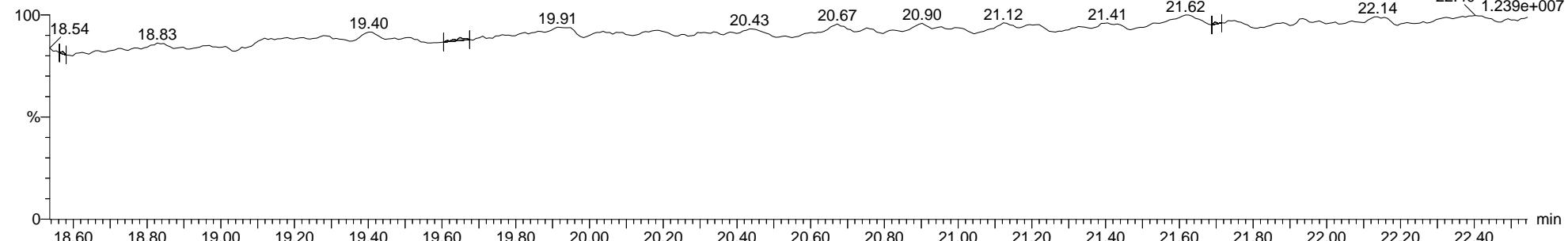
**PCB-113/90/101**5-151207C26 Smooth(Mn,1x1)  
RE L1685414-15-151207C26 Smooth(Mn,1x1)  
RE L1685414-15-151207C26 Smooth(Mn,1x1)  
RE L1685414-1

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C26, Date: 08-Dec-2015, Time: 07:38:47, ID: L1685414-1, Description: RE, Vial: Tray1:21

**13C-PCB-101**5-151207C26 Smooth(Mn,1x1)  
RE L1685414-15-151207C26 Smooth(Mn,1x1)  
RE L1685414-15-151207C26 Smooth(Mn,1x1)  
RE L1685414-1

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

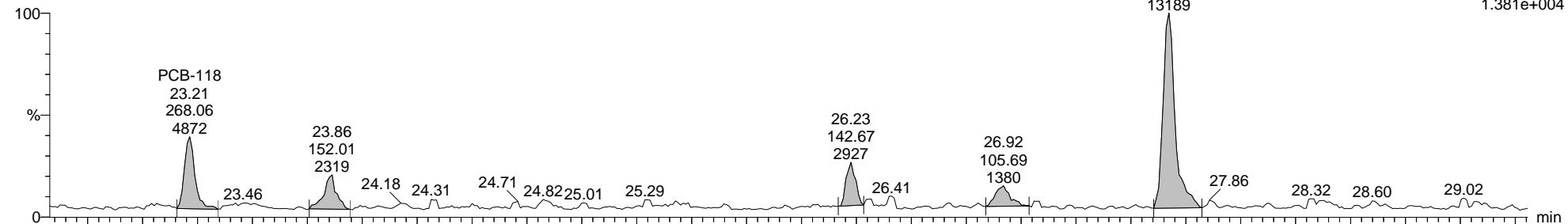
Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

**Name: 5-151207C26, Date: 08-Dec-2015, Time: 07:38:47, ID: L1685414-1, Description: RE, Vial: Tray1:21****PCB-123**

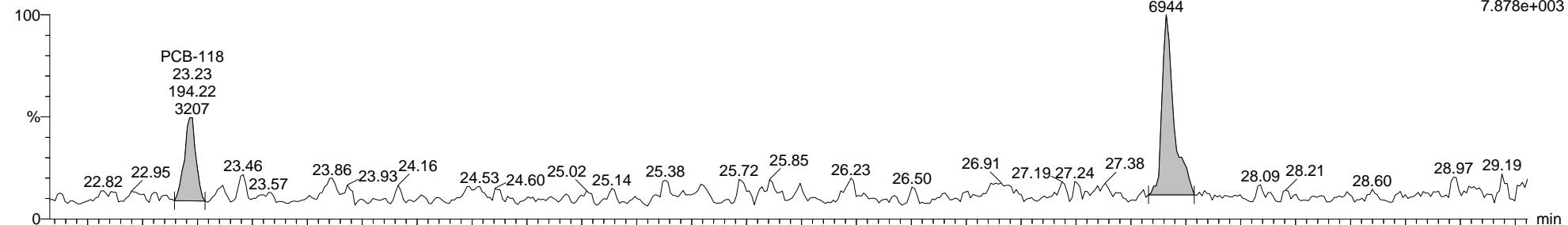
5-151207C26 Smooth(Mn,1x1)

RE L1685414-1



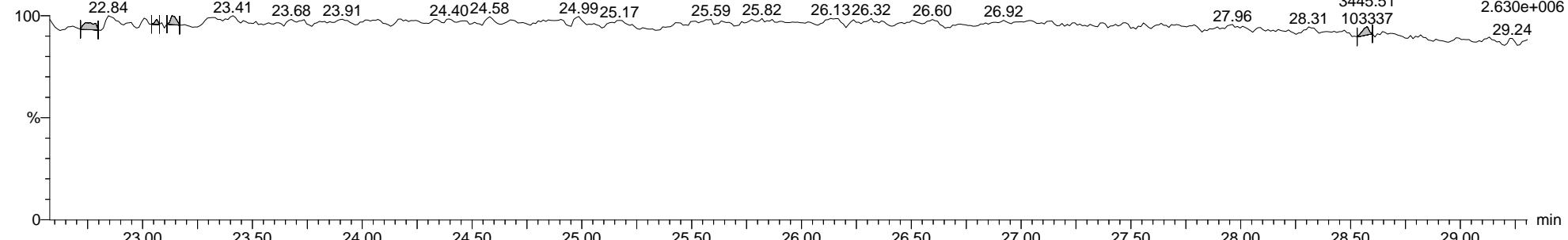
5-151207C26 Smooth(Mn,1x1)

RE L1685414-1



5-151207C26 Smooth(Mn,1x1)

RE L1685414-1



Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

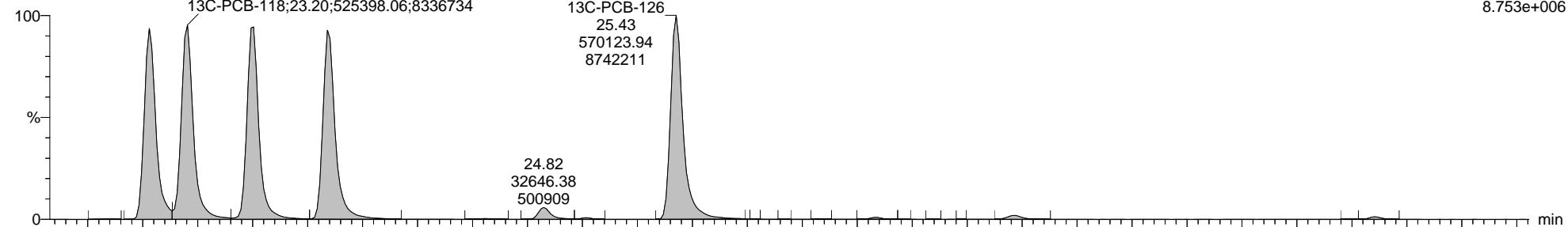
Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C26, Date: 08-Dec-2015, Time: 07:38:47, ID: L1685414-1, Description: RE, Vial: Tray1:21

**13C-PCB-123**

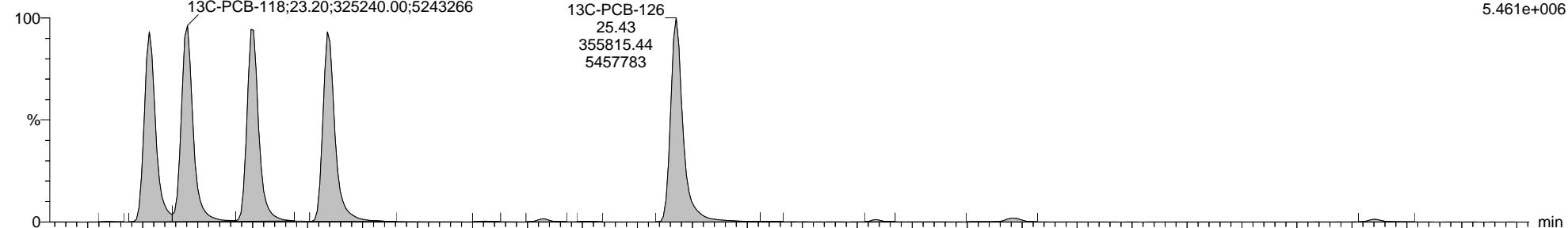
5-151207C26 Smooth(Mn,1x1)

RE L1685414-1



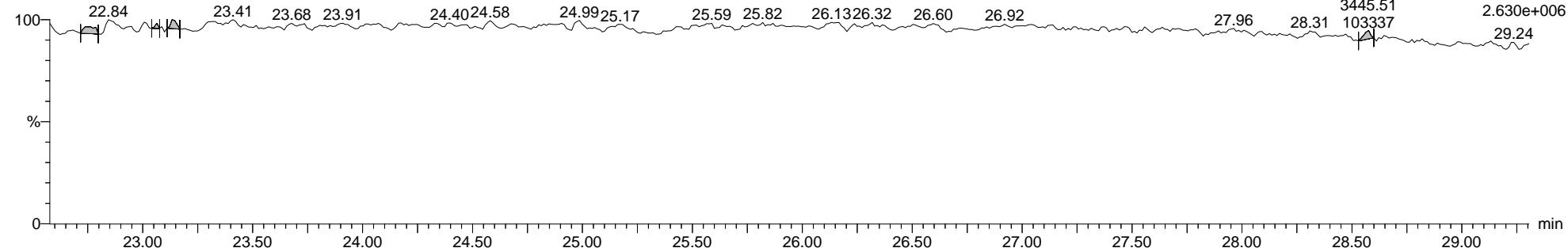
5-151207C26 Smooth(Mn,1x1)

RE L1685414-1



5-151207C26 Smooth(Mn,1x1)

RE L1685414-1



Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

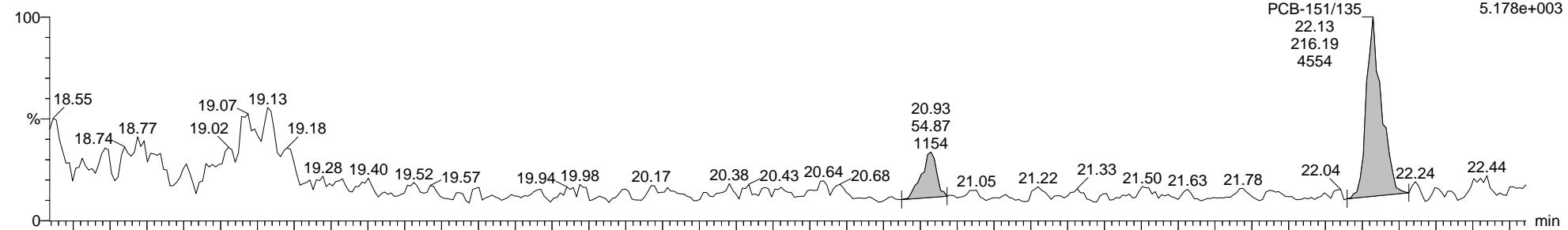
Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C26, Date: 08-Dec-2015, Time: 07:38:47, ID: L1685414-1, Description: RE, Vial: Tray1:21

**\* PCB-155**

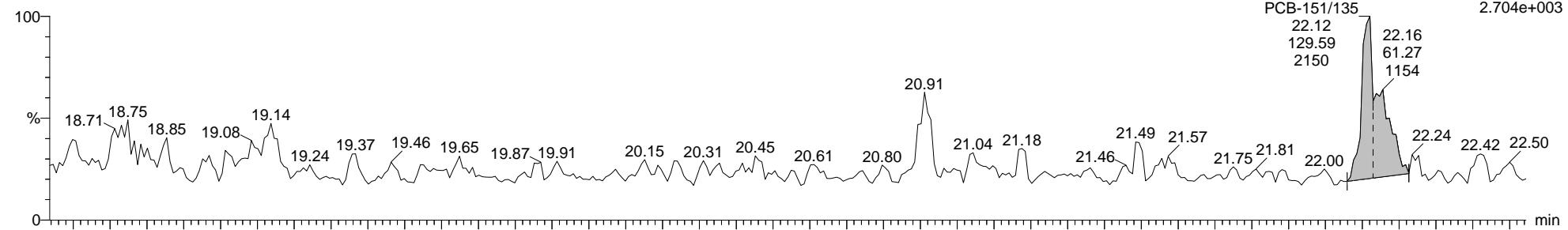
5-151207C26 Smooth(Mn,1x1)

RE L1685414-1



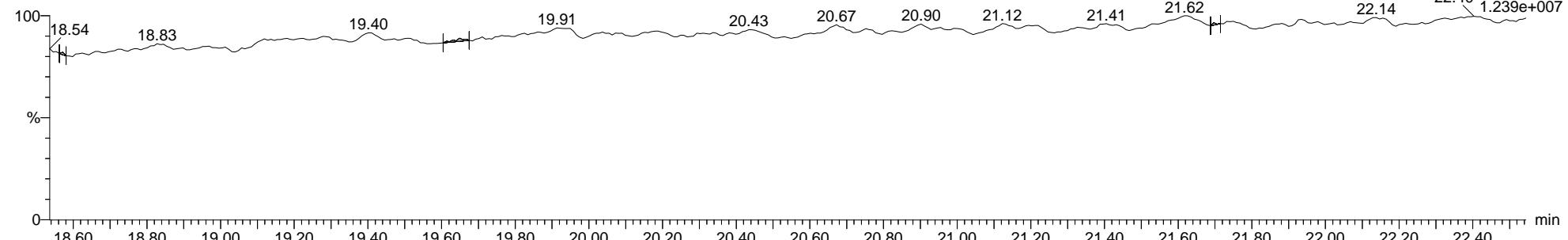
5-151207C26 Smooth(Mn,1x1)

RE L1685414-1



5-151207C26 Smooth(Mn,1x1)

RE L1685414-1

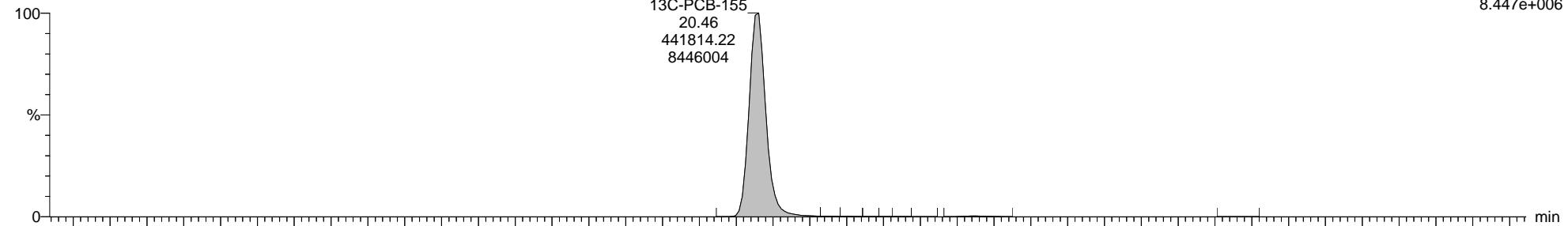
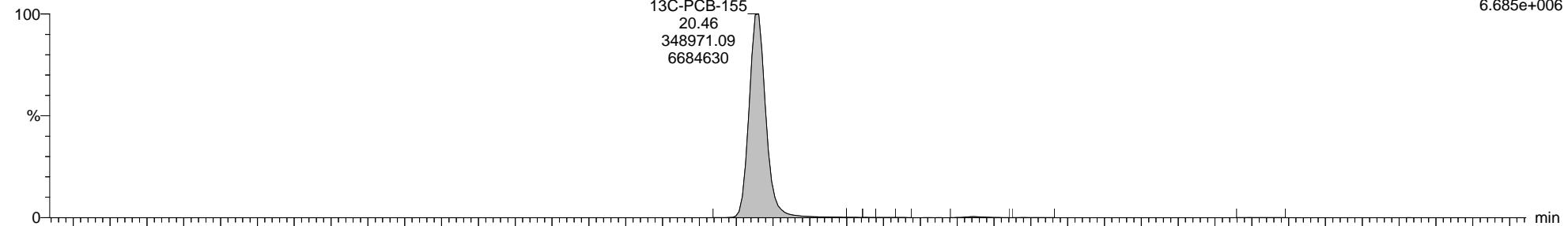
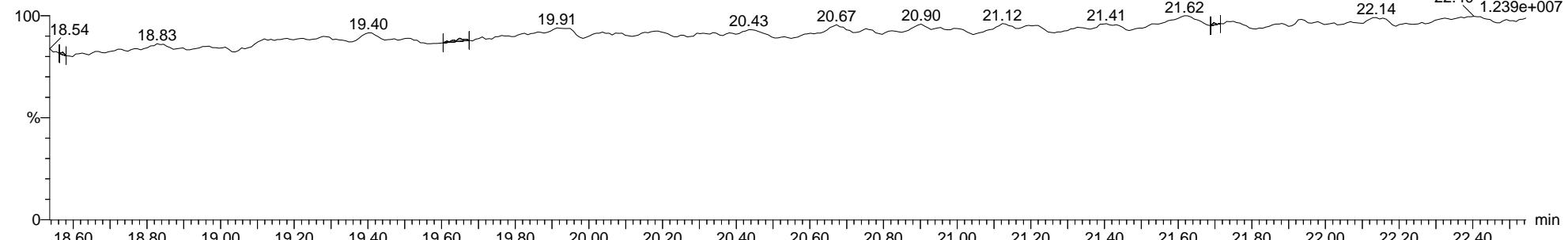


Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C26, Date: 08-Dec-2015, Time: 07:38:47, ID: L1685414-1, Description: RE, Vial: Tray1:21

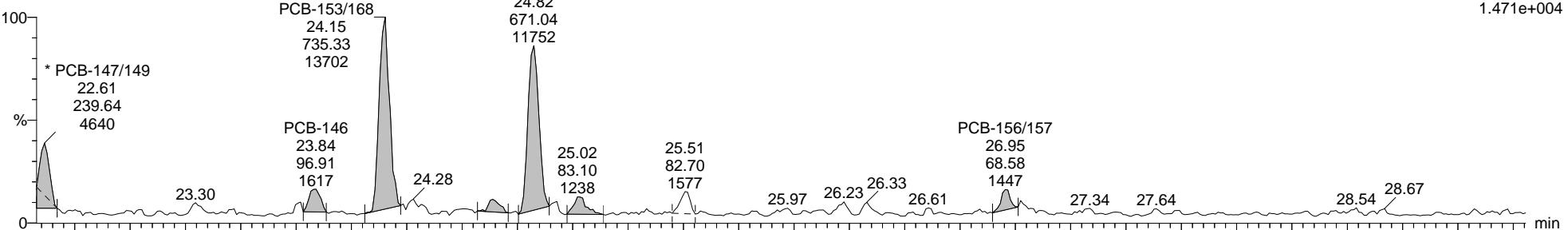
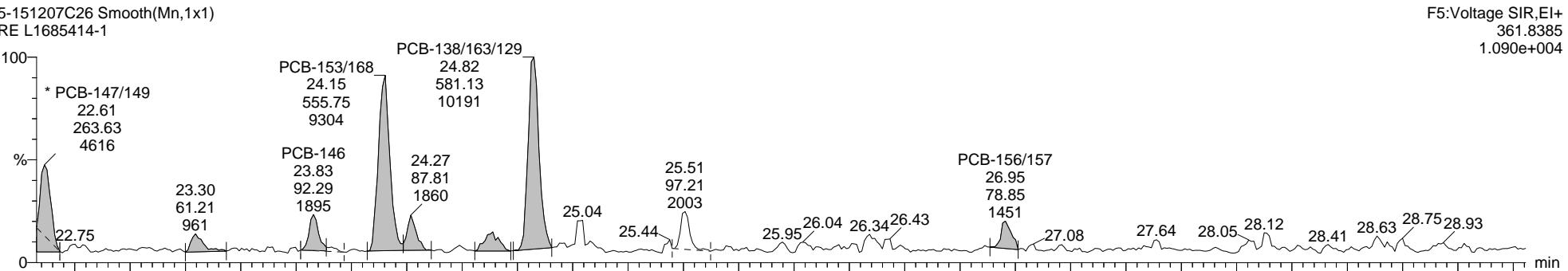
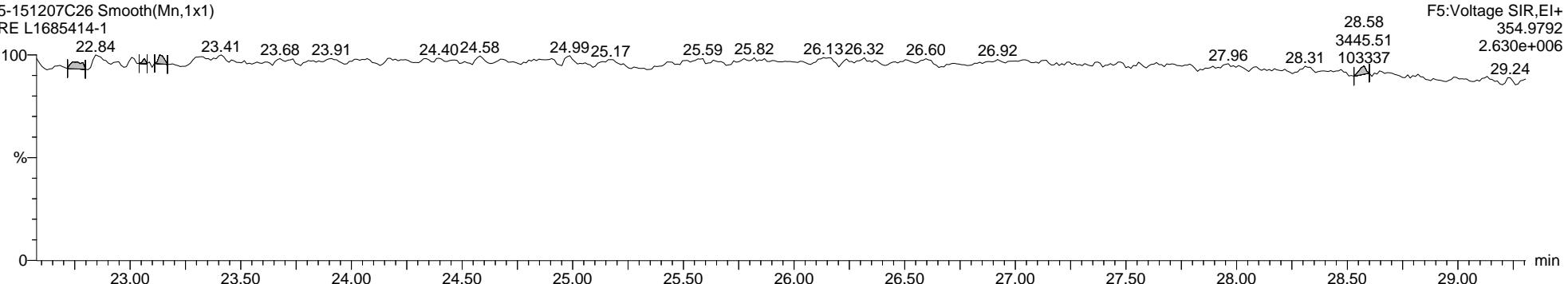
**13C-PCB-155**5-151207C26 Smooth(Mn,1x1)  
RE L1685414-15-151207C26 Smooth(Mn,1x1)  
RE L1685414-15-151207C26 Smooth(Mn,1x1)  
RE L1685414-1

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C26, Date: 08-Dec-2015, Time: 07:38:47, ID: L1685414-1, Description: RE, Vial: Tray1:21

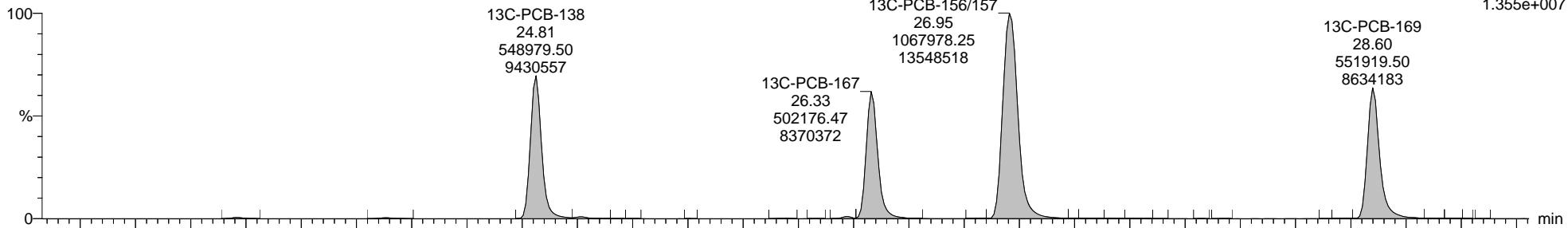
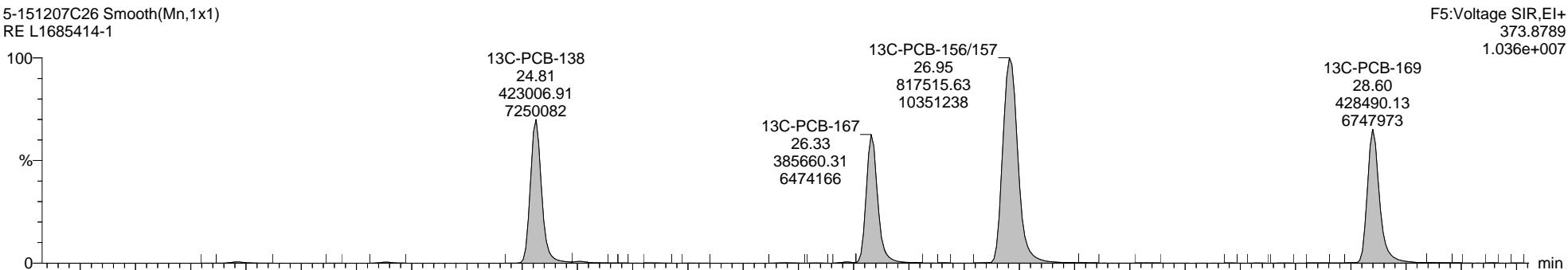
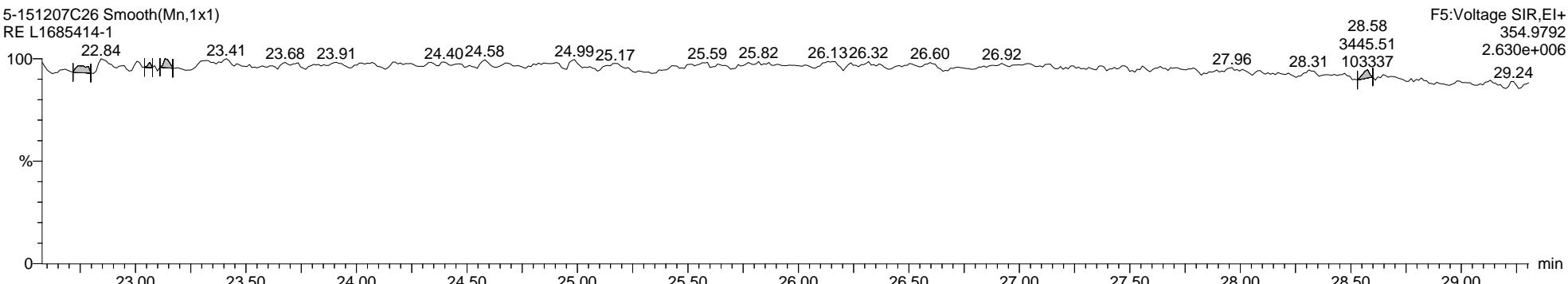
**PCB-167**5-151207C26 Smooth(Mn,1x1)  
RE L1685414-15-151207C26 Smooth(Mn,1x1)  
RE L1685414-15-151207C26 Smooth(Mn,1x1)  
RE L1685414-1

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C26, Date: 08-Dec-2015, Time: 07:38:47, ID: L1685414-1, Description: RE, Vial: Tray1:21

**13C-PCB-167**5-151207C26 Smooth(Mn,1x1)  
RE L1685414-15-151207C26 Smooth(Mn,1x1)  
RE L1685414-15-151207C26 Smooth(Mn,1x1)  
RE L1685414-1

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

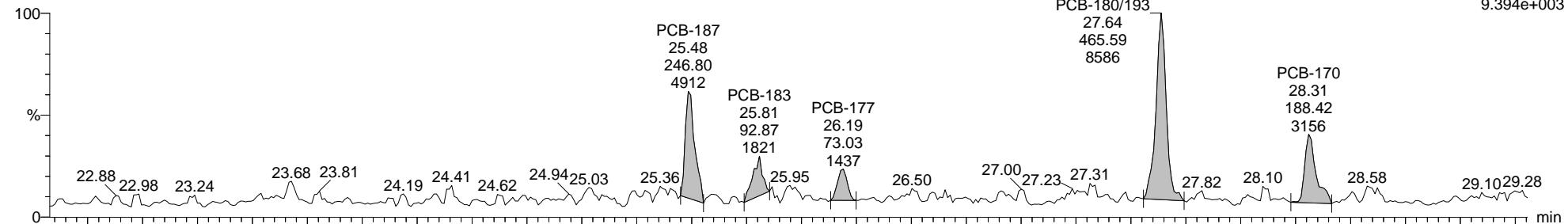
Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C26, Date: 08-Dec-2015, Time: 07:38:47, ID: L1685414-1, Description: RE, Vial: Tray1:21

**\* PCB-188**

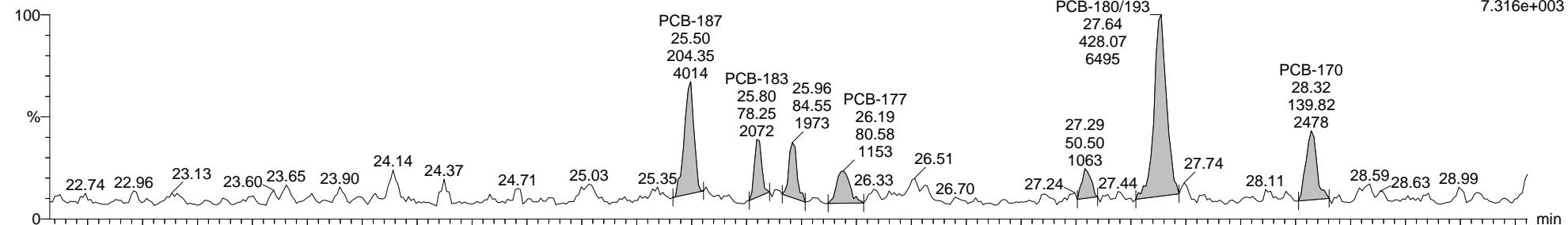
5-151207C26 Smooth(Mn,1x1)

RE L1685414-1



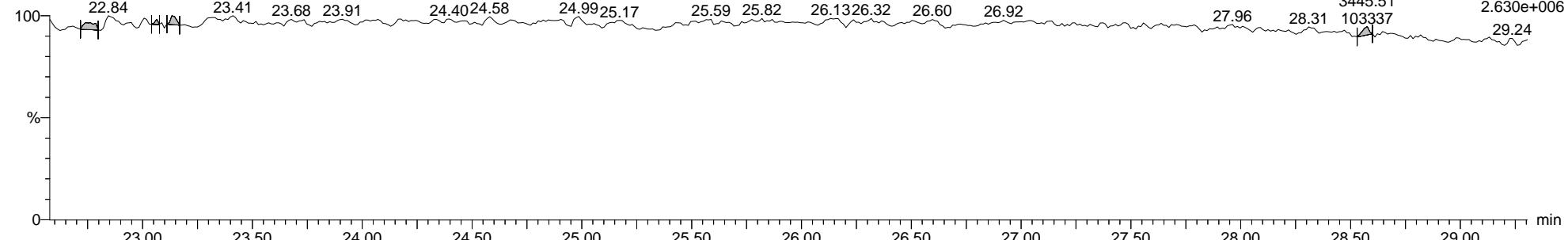
5-151207C26 Smooth(Mn,1x1)

RE L1685414-1



5-151207C26 Smooth(Mn,1x1)

RE L1685414-1

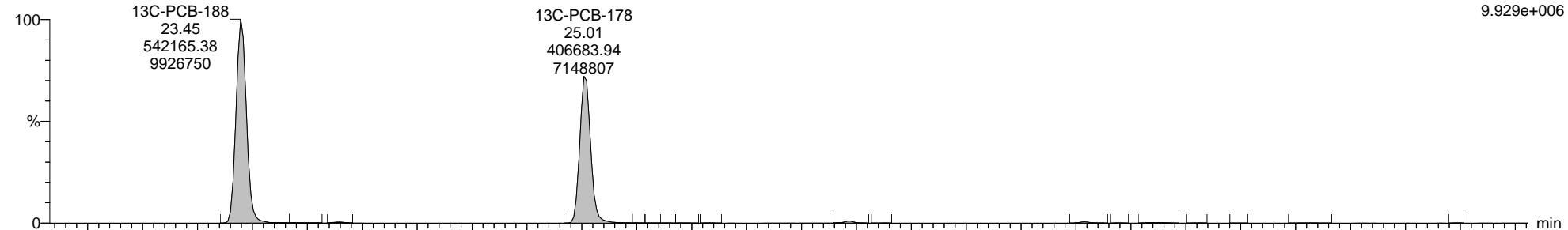
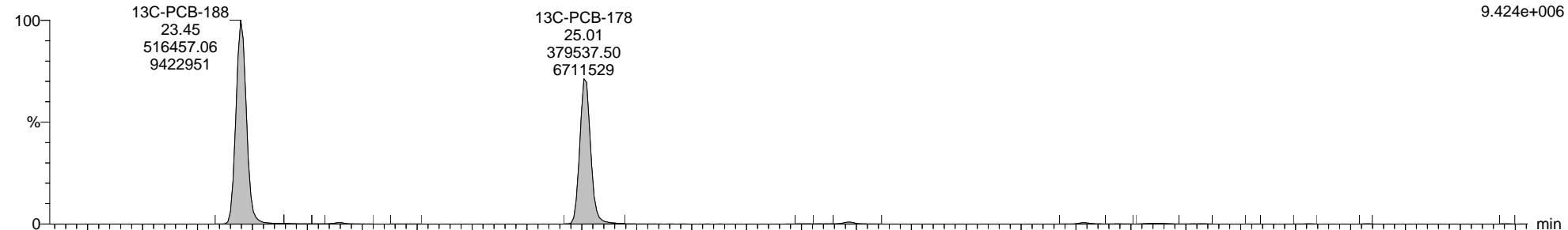
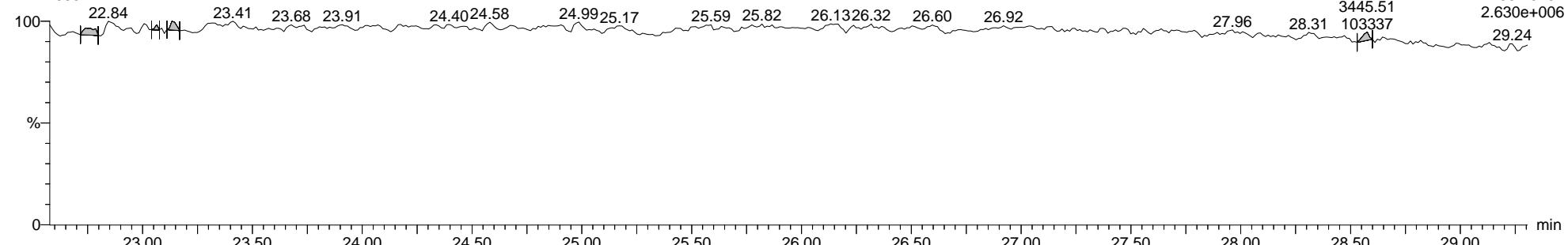


Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C26, Date: 08-Dec-2015, Time: 07:38:47, ID: L1685414-1, Description: RE, Vial: Tray1:21

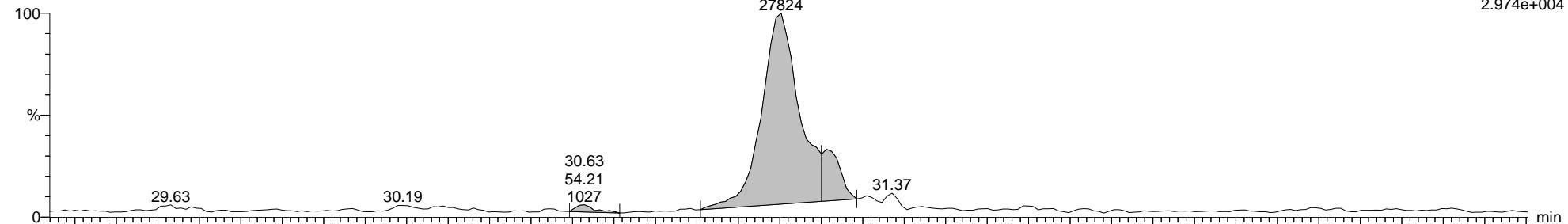
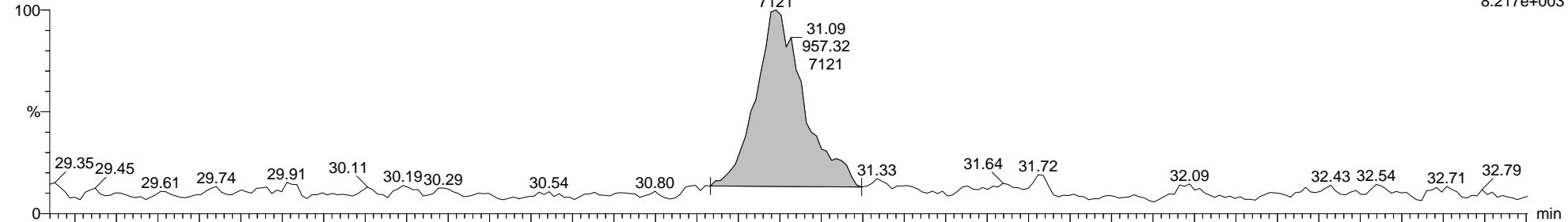
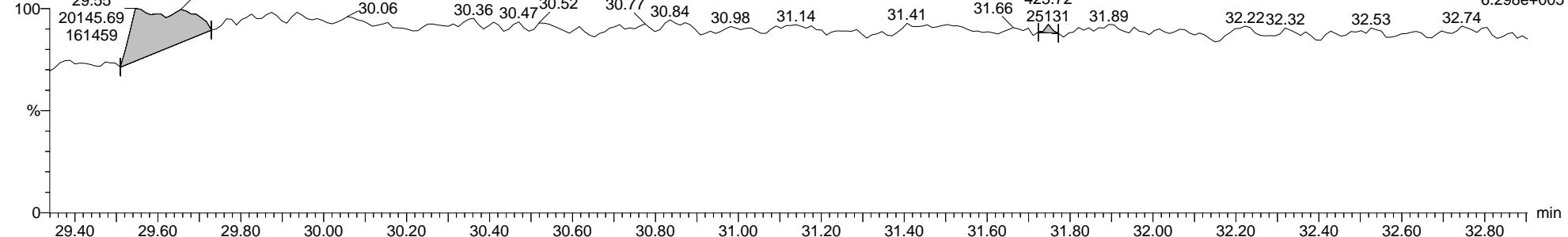
**13C-PCB-188**5-151207C26 Smooth(Mn,1x1)  
RE L1685414-15-151207C26 Smooth(Mn,1x1)  
RE L1685414-15-151207C26 Smooth(Mn,1x1)  
RE L1685414-1

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C26, Date: 08-Dec-2015, Time: 07:38:47, ID: L1685414-1, Description: RE, Vial: Tray1:21

**\* PCB-189**5-151207C26 Smooth(Mn,1x1)  
RE L1685414-1F6:Voltage SIR,EI+  
393.8025  
2.974e+0045-151207C26 Smooth(Mn,1x1)  
RE L1685414-1F6:Voltage SIR,EI+  
395.7995  
8.217e+0035-151207C26 Smooth(Mn,1x1)  
RE L1685414-1F6:Voltage SIR,EI+  
454.9728  
6.298e+005

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

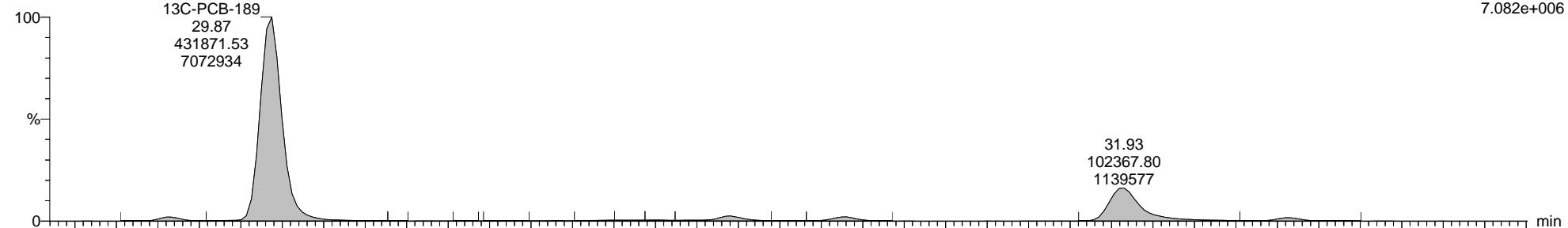
Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C26, Date: 08-Dec-2015, Time: 07:38:47, ID: L1685414-1, Description: RE, Vial: Tray1:21

**13C-PCB-189**

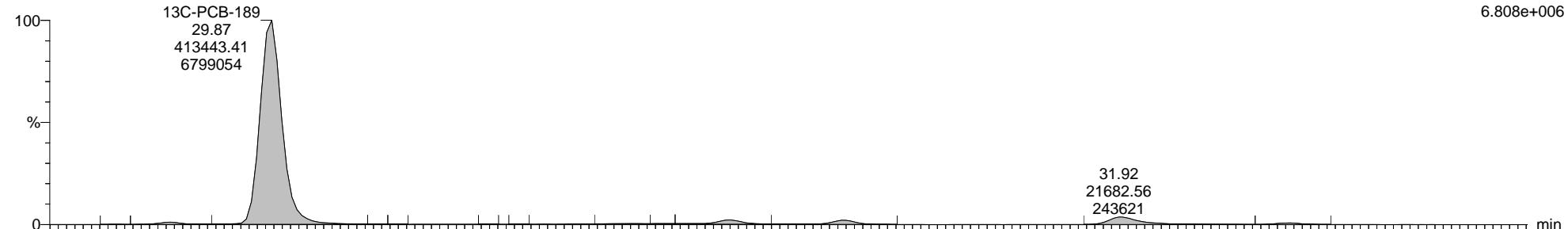
5-151207C26 Smooth(Mn,1x1)

RE L1685414-1



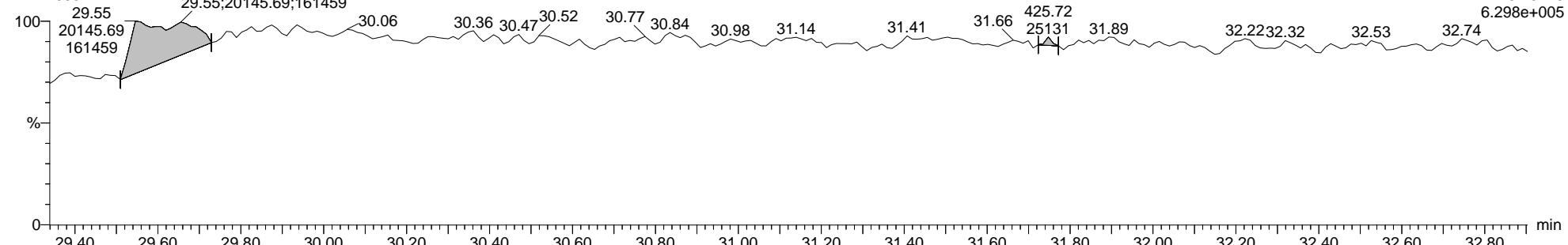
5-151207C26 Smooth(Mn,1x1)

RE L1685414-1



5-151207C26 Smooth(Mn,1x1)

RE L1685414-1



Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

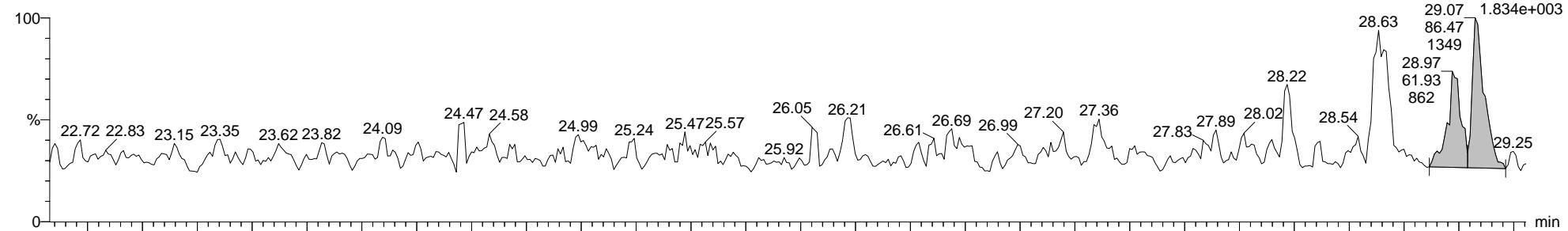
Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C26, Date: 08-Dec-2015, Time: 07:38:47, ID: L1685414-1, Description: RE, Vial: Tray1:21

**\* PCB-202**

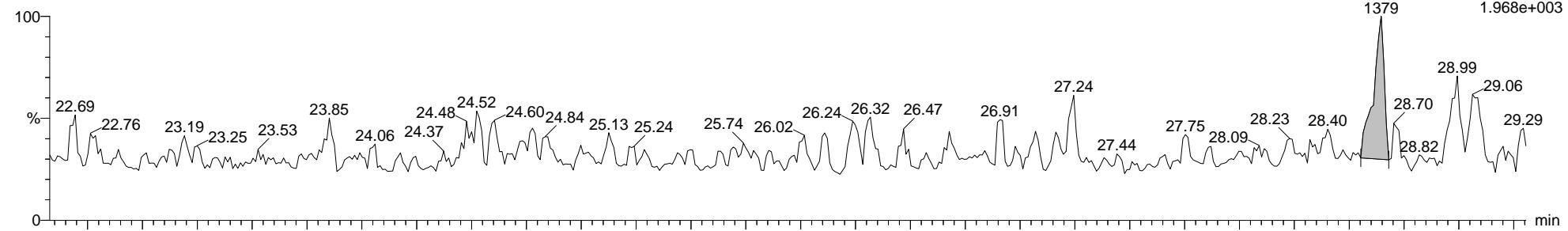
5-151207C26 Smooth(Mn,1x1)

RE L1685414-1



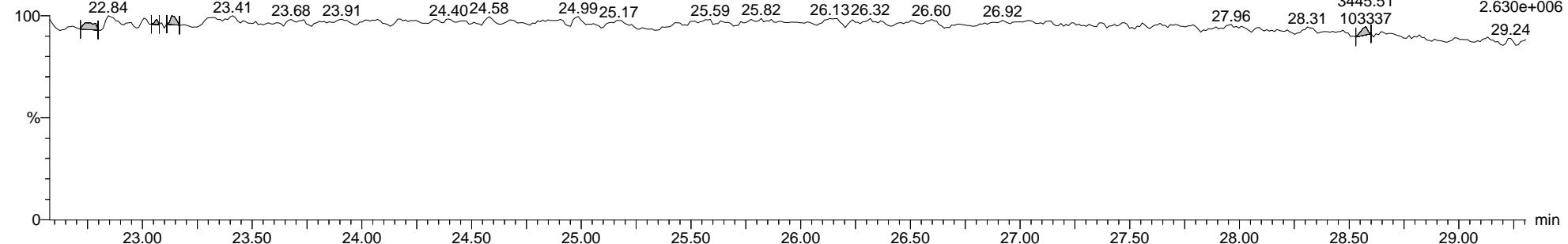
5-151207C26 Smooth(Mn,1x1)

RE L1685414-1



5-151207C26 Smooth(Mn,1x1)

RE L1685414-1



Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

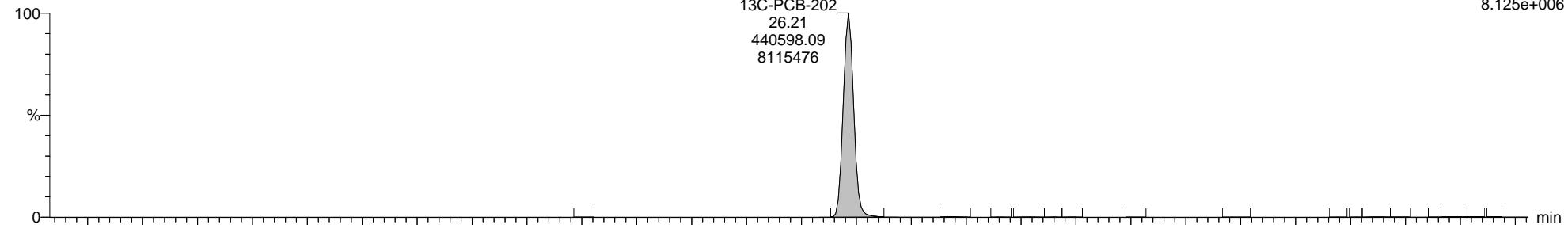
Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

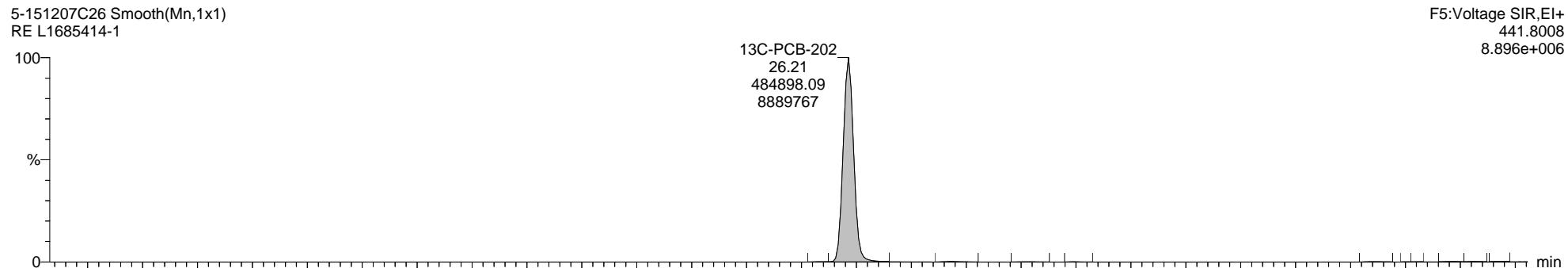
Name: 5-151207C26, Date: 08-Dec-2015, Time: 07:38:47, ID: L1685414-1, Description: RE, Vial: Tray1:21

### 13C-PCB-202

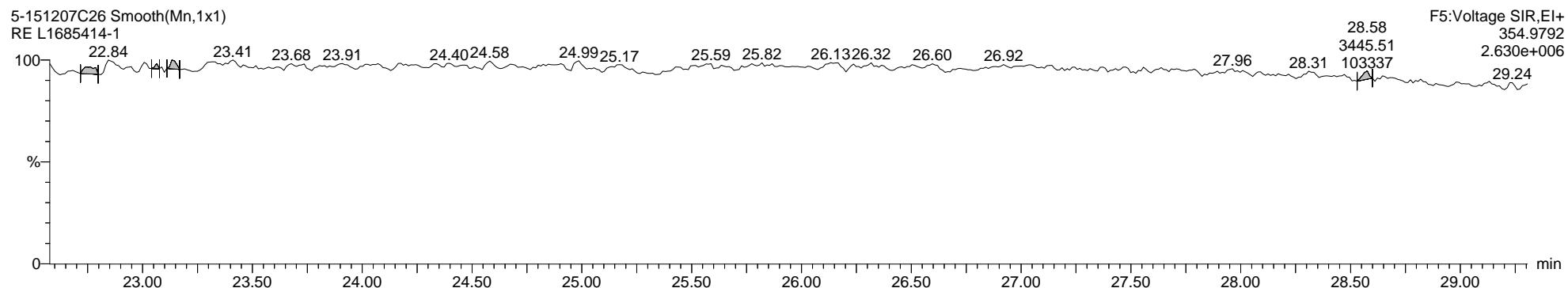
5-151207C26 Smooth(Mn,1x1)  
RE L1685414-1



5-151207C26 Smooth(Mn,1x1)  
RE L1685414-1



5-151207C26 Smooth(Mn,1x1)  
RE L1685414-1



Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C26, Date: 08-Dec-2015, Time: 07:38:47, ID: L1685414-1, Description: RE, Vial: Tray1:21

**\* PCB-195**

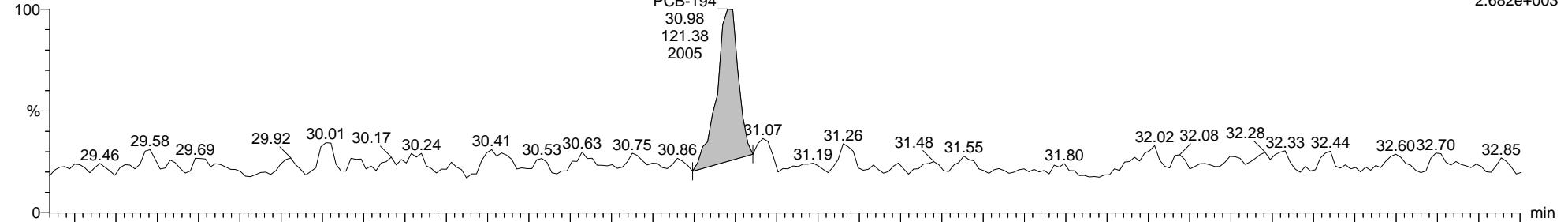
5-151207C26 Smooth(Mn,1x1)

RE L1685414-1

F6:Voltage SIR, EI+

427.7635

2.682e+003



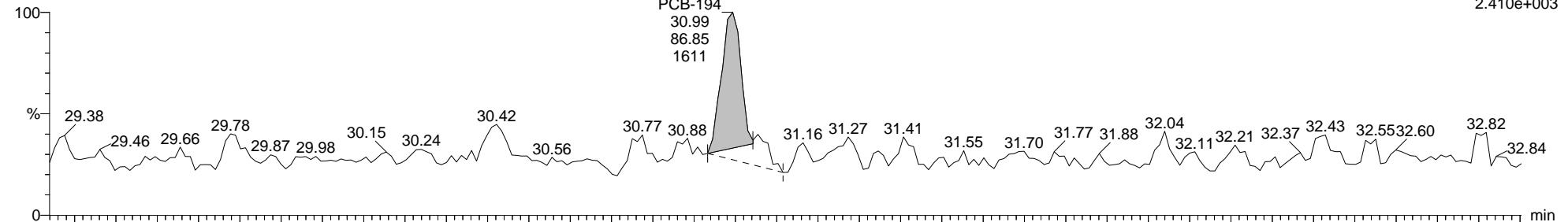
5-151207C26 Smooth(Mn,1x1)

RE L1685414-1

F6:Voltage SIR, EI+

429.7606

2.410e+003



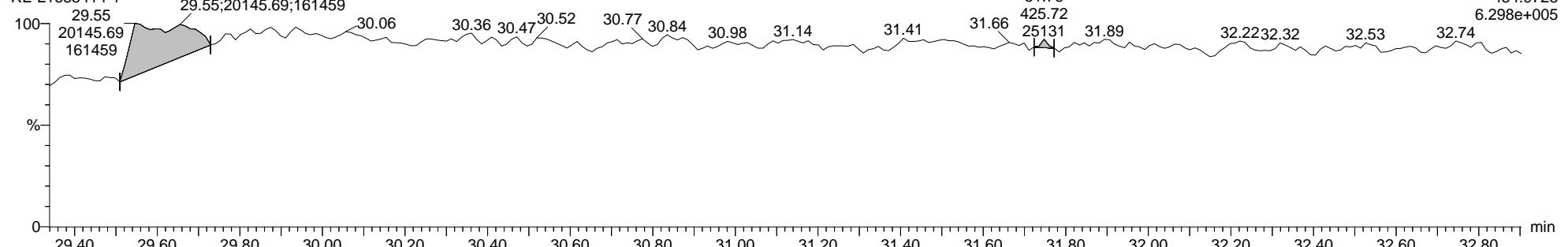
5-151207C26 Smooth(Mn,1x1)

RE L1685414-1

F6:Voltage SIR, EI+

454.9728

6.298e+005

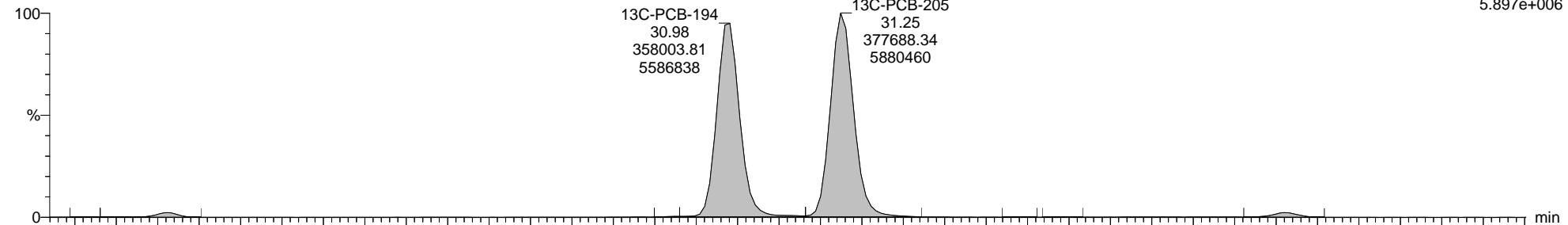
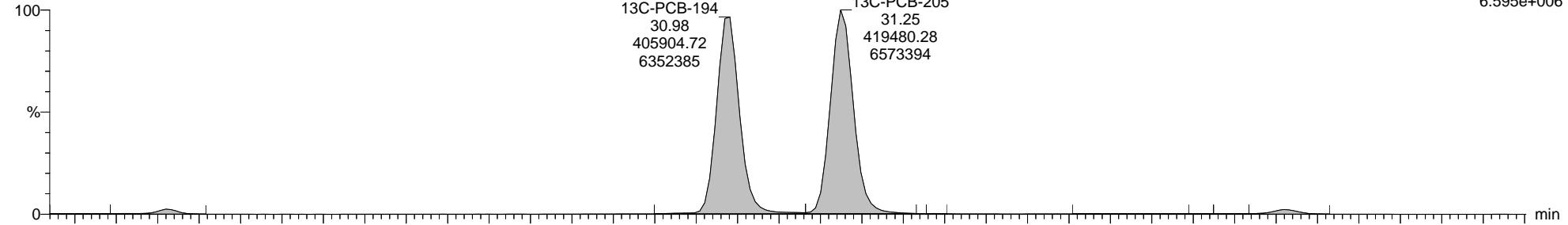
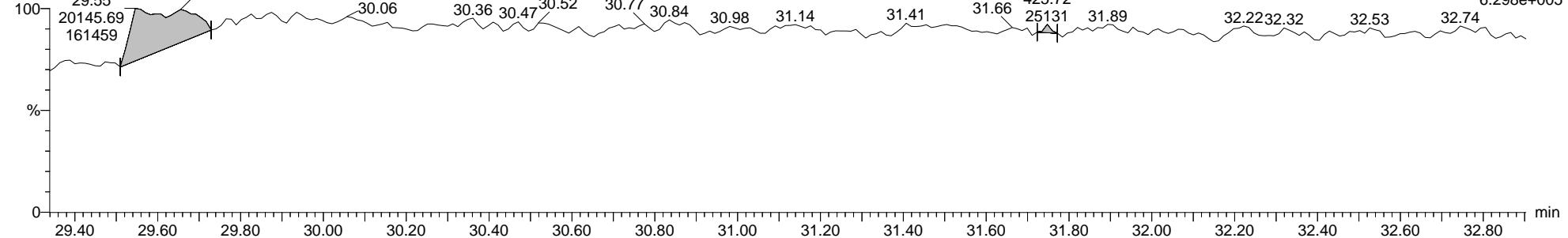


Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C26, Date: 08-Dec-2015, Time: 07:38:47, ID: L1685414-1, Description: RE, Vial: Tray1:21

**13C-PCB-205**5-151207C26 Smooth(Mn,1x1)  
RE L1685414-1F6:Voltage SIR,EI+  
439.8038  
5.897e+0065-151207C26 Smooth(Mn,1x1)  
RE L1685414-1F6:Voltage SIR,EI+  
441.8008  
6.595e+0065-151207C26 Smooth(Mn,1x1)  
RE L1685414-1F6:Voltage SIR,EI+  
454.9728  
6.298e+005

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

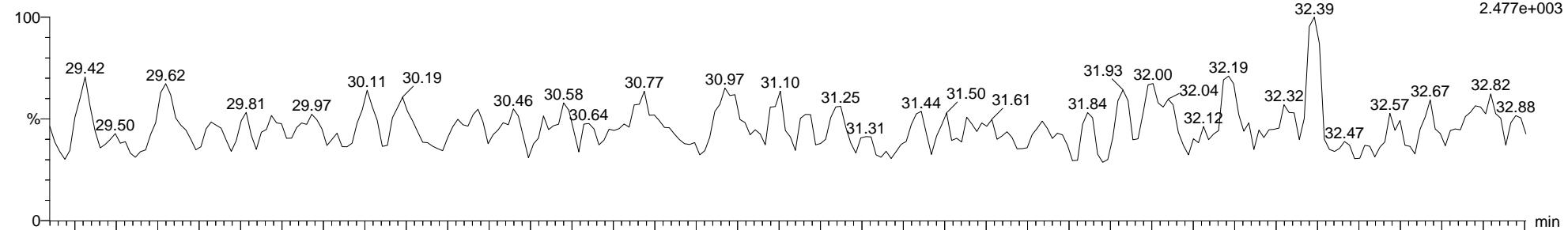
Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C26, Date: 08-Dec-2015, Time: 07:38:47, ID: L1685414-1, Description: RE, Vial: Tray1:21

**\* PCB-208**

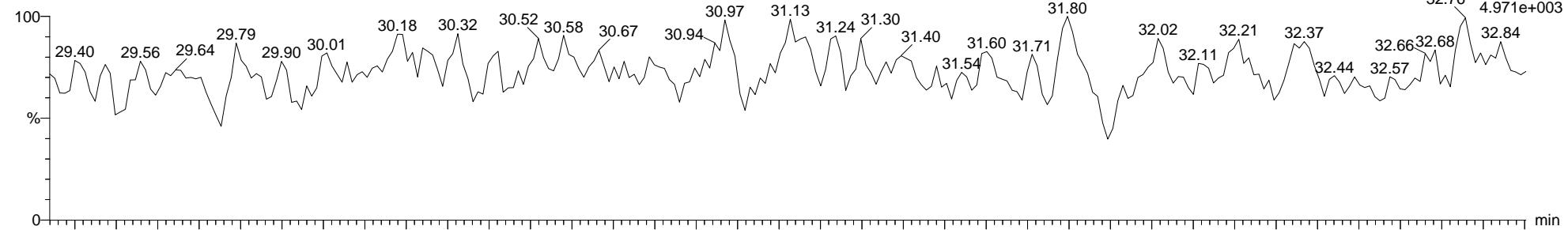
5-151207C26 Smooth(Mn,1x1)

RE L1685414-1



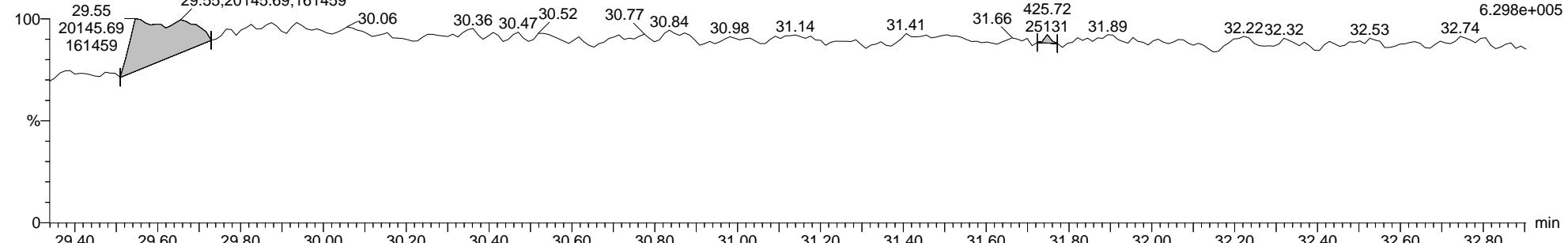
5-151207C26 Smooth(Mn,1x1)

RE L1685414-1



5-151207C26 Smooth(Mn,1x1)

RE L1685414-1



Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

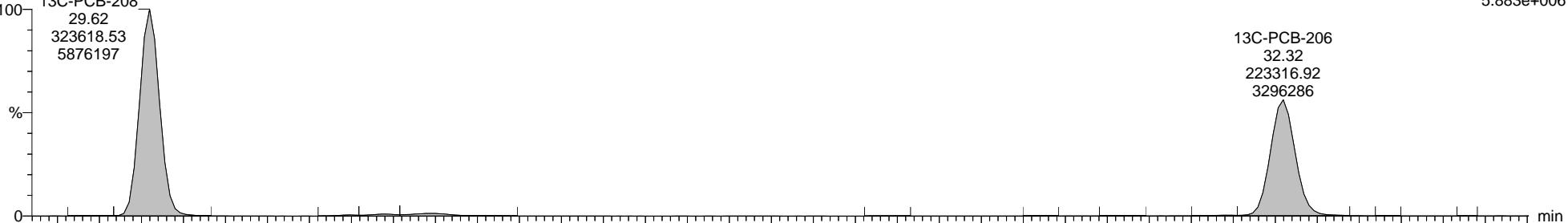
Name: 5-151207C26, Date: 08-Dec-2015, Time: 07:38:47, ID: L1685414-1, Description: RE, Vial: Tray1:21

**13C-PCB-208**

5-151207C26 Smooth(Mn,1x1)

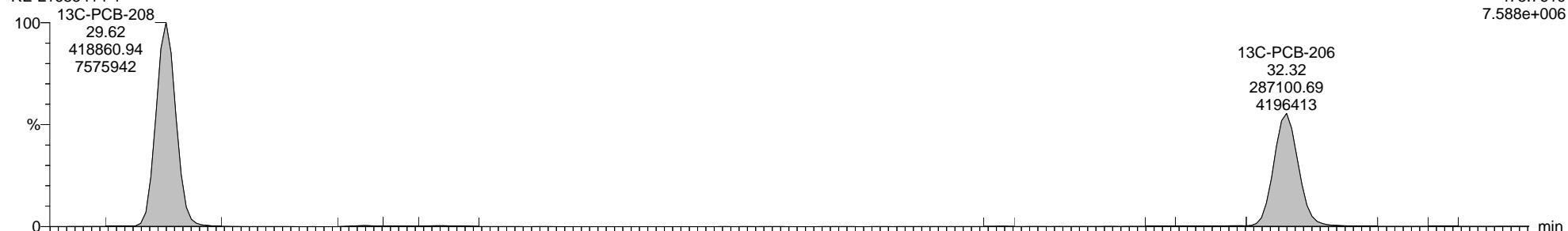
RE L1685414-1

13C-PCB-208

29.62  
323618.53  
5876197F6:Voltage SIR,EI+  
473.7648  
5.883e+00613C-PCB-206  
32.32  
223316.92  
3296286

5-151207C26 Smooth(Mn,1x1)

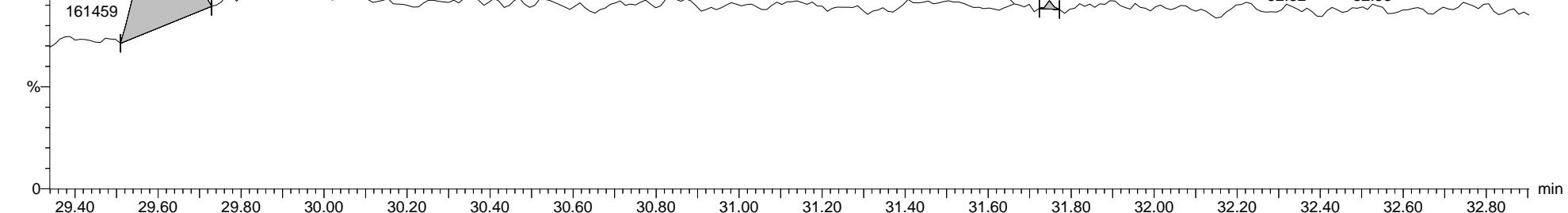
RE L1685414-1

13C-PCB-208  
29.62  
418860.94  
7575942F6:Voltage SIR,EI+  
475.7619  
7.588e+00613C-PCB-206  
32.32  
287100.69  
4196413

5-151207C26 Smooth(Mn,1x1)

RE L1685414-1

29.55;20145.69;161459

29.55  
20145.69  
161459F6:Voltage SIR,EI+  
454.9728  
6.298e+005

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

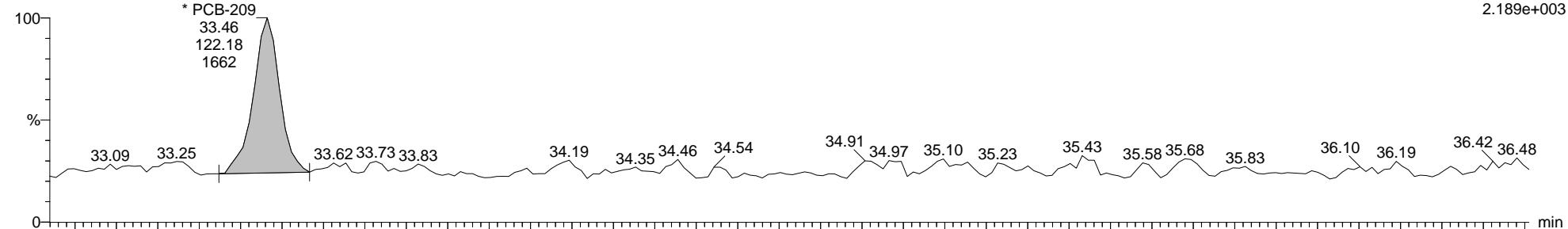
Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C26, Date: 08-Dec-2015, Time: 07:38:47, ID: L1685414-1, Description: RE, Vial: Tray1:21

**\* PCB-209**

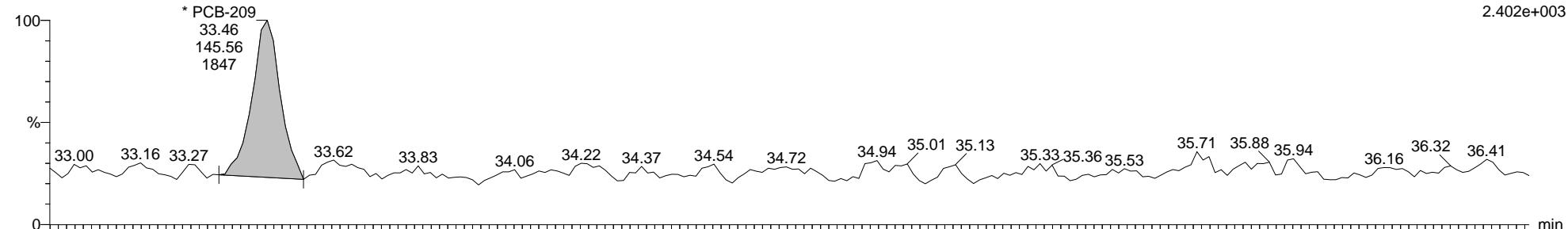
5-151207C26 Smooth(Mn,1x1)

RE L1685414-1



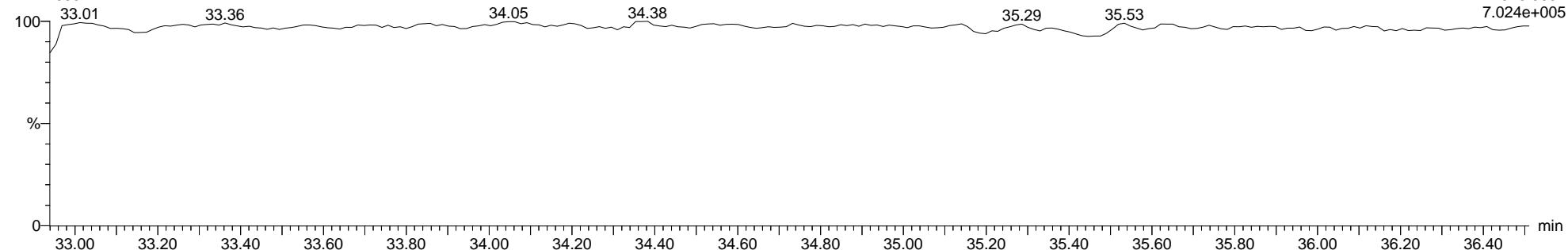
5-151207C26 Smooth(Mn,1x1)

RE L1685414-1



5-151207C26 Smooth(Mn,1x1)

RE L1685414-1



Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

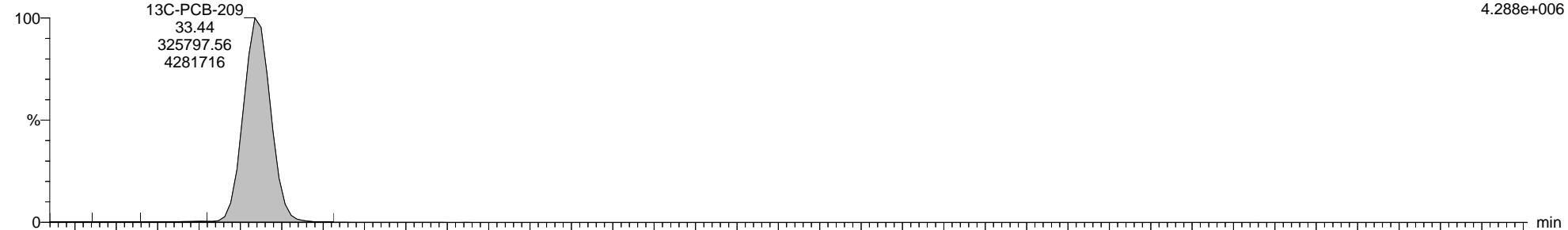
Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Name: 5-151207C26, Date: 08-Dec-2015, Time: 07:38:47, ID: L1685414-1, Description: RE, Vial: Tray1:21

### 13C-PCB-209

5-151207C26 Smooth(Mn,1x1)

RE L1685414-1



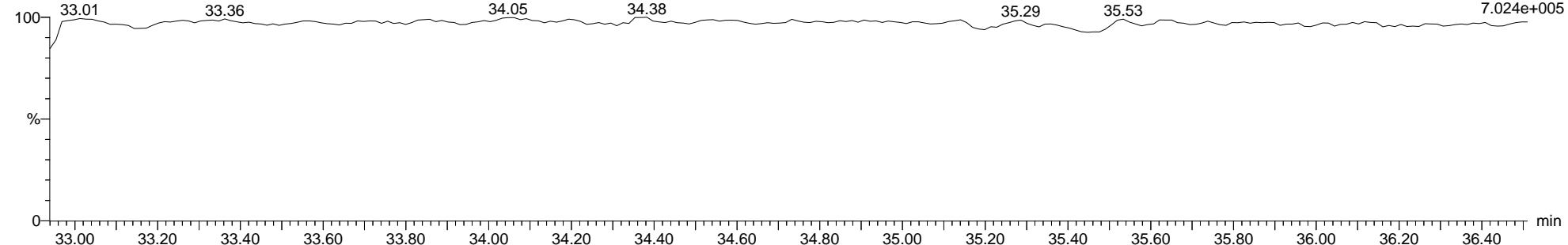
5-151207C26 Smooth(Mn,1x1)

RE L1685414-1



5-151207C26 Smooth(Mn,1x1)

RE L1685414-1



**Quantify Audit Report MassLynx MassLynx V4.1 SCN 901**

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Date	Time	Event	Details	Comments
11-Dec-15	15:05:34	Peak added	Sample:5-151207C26, Compound:TrCB-F2, RT:13.911	ES151211MA
11-Dec-15	15:05:34	Peak added	Sample:5-151207C26, Compound:TrCB-F2, RT:13.920	ES151211MA
11-Dec-15	15:07:57	Pre modification peak	Sample:5-151207C26, Compound:TeCB-F3, RT:16.051	
11-Dec-15	15:07:57	Peak modified	Sample:5-151207C26, Compound:TeCB-F3, RT:16.051	ES151211MB
11-Dec-15	15:09:10	Pre modification peak	Sample:5-151207C26, Compound:TeCB-F3, RT:17.513	
11-Dec-15	15:09:10	Peak modified	Sample:5-151207C26, Compound:TeCB-F3, RT:17.513	ES151211MB
11-Dec-15	15:09:37	Pre modification peak	Sample:5-151207C26, Compound:TeCB-F3, RT:18.196	
11-Dec-15	15:09:37	Peak modified	Sample:5-151207C26, Compound:TeCB-F3, RT:18.196	ES151211MB
11-Dec-15	15:09:58	Pre modification peak	Sample:5-151207C26, Compound:TeCB-F4, RT:19.534	
11-Dec-15	15:09:58	Peak modified	Sample:5-151207C26, Compound:TeCB-F4, RT:19.534	ES151211MB
11-Dec-15	15:10:26	Peak added	Sample:5-151207C26, Compound:TeCB-F4, RT:19.728	ES151211MA
11-Dec-15	15:10:26	Peak added	Sample:5-151207C26, Compound:TeCB-F4, RT:19.719	ES151211MA
11-Dec-15	15:10:50	Pre modification peak	Sample:5-151207C26, Compound:PeCB-F4, RT:19.084	
11-Dec-15	15:10:50	Peak modified	Sample:5-151207C26, Compound:PeCB-F4, RT:19.084	ES151211MB
11-Dec-15	15:11:08	Pre modification peak	Sample:5-151207C26, Compound:PeCB-F4, RT:20.911	
11-Dec-15	15:11:08	Peak modified	Sample:5-151207C26, Compound:PeCB-F4, RT:20.911	ES151211MB
11-Dec-15	15:11:19	Pre modification peak	Sample:5-151207C26, Compound:PeCB-F4, RT:21.238	
11-Dec-15	15:11:19	Peak modified	Sample:5-151207C26, Compound:PeCB-F4, RT:21.238	ES151211MB
11-Dec-15	15:11:47	Pre modification peak	Sample:5-151207C26, Compound:HxCB-F4, RT:22.121	
11-Dec-15	15:11:47	Peak modified	Sample:5-151207C26, Compound:HxCB-F4, RT:22.121	ES151211MJ
11-Dec-15	15:12:46	Pre modification peak	Sample:5-151207C26, Compound:HxCB-F5, RT:22.612	
11-Dec-15	15:12:46	Peak modified	Sample:5-151207C26, Compound:HxCB-F5, RT:22.612	ES151211MB
11-Dec-15	15:12:46	Pre modification peak	Sample:5-151207C26, Compound:HxCB-F5, RT:22.612	
11-Dec-15	15:12:46	Peak modified	Sample:5-151207C26, Compound:HxCB-F5, RT:22.612	ES151211MB
11-Dec-15	15:13:08	Pre modification peak	Sample:5-151207C26, Compound:HxCB-F5, RT:23.828	
11-Dec-15	15:13:08	Peak modified	Sample:5-151207C26, Compound:HxCB-F5, RT:23.828	ES151211MB
11-Dec-15	15:13:34	Peak deleted	Sample:5-151207C26, Compound:HxCB-F5, RT:25.507	
11-Dec-15	15:13:34	Peak deleted	Sample:5-151207C26, Compound:HxCB-F5, RT:25.507	
11-Dec-15	15:15:06	Pre modification peak	Sample:5-151207C26, Compound:OcCB-F6, RT:30.994	
11-Dec-15	15:15:06	Peak modified	Sample:5-151207C26, Compound:OcCB-F6, RT:30.994	ES151211MB
11-Dec-15	15:15:18	Dataset Saved	Saved to 'C:\MassLynx\PCB.PRO\Results\5-151207C2-1210...'	
11-Dec-15	15:15:42	Peak deleted	Sample:5-151207C27, Compound:MoCB-F1, RT:10.280	
11-Dec-15	15:16:15	Pre modification peak	Sample:5-151207C27, Compound:DiCB-F1, RT:12.361	
11-Dec-15	15:16:15	Peak modified	Sample:5-151207C27, Compound:DiCB-F1, RT:12.361	ES151211MB
11-Dec-15	15:16:32	Pre modification peak	Sample:5-151207C27, Compound:DiCB-F2, RT:13.859	
11-Dec-15	15:16:32	Peak modified	Sample:5-151207C27, Compound:DiCB-F2, RT:13.859	ES151211MB
11-Dec-15	15:17:17	Pre modification peak	Sample:5-151207C27, Compound:TrCB-F2, RT:13.676	
11-Dec-15	15:17:17	Peak modified	Sample:5-151207C27, Compound:TrCB-F2, RT:13.676	ES151211MB
11-Dec-15	15:17:29	Pre modification peak	Sample:5-151207C27, Compound:TrCB-F2, RT:13.902	
11-Dec-15	15:17:29	Peak modified	Sample:5-151207C27, Compound:TrCB-F2, RT:13.902	ES151211MB
11-Dec-15	15:17:56	Peak added	Sample:5-151207C27, Compound:TrCB-F2, RT:14.495	ES151211MA
11-Dec-15	15:17:56	Peak added	Sample:5-151207C27, Compound:TrCB-F2, RT:14.486	ES151211MA
11-Dec-15	15:19:09	Pre modification peak	Sample:5-151207C27, Compound:TeCB-F3, RT:15.649	
11-Dec-15	15:19:09	Peak modified	Sample:5-151207C27, Compound:TeCB-F3, RT:15.649	ES151211MB
11-Dec-15	15:19:35	Pre modification peak	Sample:5-151207C27, Compound:TeCB-F3, RT:17.213	
11-Dec-15	15:19:35	Peak modified	Sample:5-151207C27, Compound:TeCB-F3, RT:17.213	ES151211MB
11-Dec-15	15:20:12	Peak added	Sample:5-151207C27, Compound:TeCB-F4, RT:19.543	ES151211MB
11-Dec-15	15:20:12	Peak added	Sample:5-151207C27, Compound:TeCB-F4, RT:19.543	ES151211MB
11-Dec-15	15:20:19	Pre modification peak	Sample:5-151207C27, Compound:TeCB-F4, RT:19.711	
11-Dec-15	15:20:19	Peak modified	Sample:5-151207C27, Compound:TeCB-F4, RT:19.711	ES151211MB
11-Dec-15	15:21:12	Peak added	Sample:5-151207C27, Compound:PeCB-F4, RT:21.185	ES151211MA
11-Dec-15	15:21:12	Peak added	Sample:5-151207C27, Compound:PeCB-F4, RT:21.194	ES151211MA
11-Dec-15	15:21:34	Pre modification peak	Sample:5-151207C27, Compound:PeCB-F4, RT:21.679	

**Quantify Audit Report MassLynx MassLynx V4.1 SCN 901**

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Date	Time	Event	Details	Comments
11-Dec-15	15:21:34	Peak modified	Sample:5-151207C27, Compound:PeCB-F4, RT:21.679	ES151211MB
11-Dec-15	15:21:34	Pre modification peak	Sample:5-151207C27, Compound:PeCB-F4, RT:21.670	
11-Dec-15	15:21:34	Peak modified	Sample:5-151207C27, Compound:PeCB-F4, RT:21.670	ES151211MB
11-Dec-15	15:22:27	Peak added	Sample:5-151207C27, Compound:HxCB-F5, RT:22.624	ES151211MA
11-Dec-15	15:22:27	Peak added	Sample:5-151207C27, Compound:HxCB-F5, RT:22.624	ES151211MA
11-Dec-15	15:23:34	Pre modification peak	Sample:5-151207C27, Compound:DeCB-F7, RT:33.450	
11-Dec-15	15:23:34	Peak modified	Sample:5-151207C27, Compound:DeCB-F7, RT:33.450	
11-Dec-15	15:23:40	Dataset Saved	Saved to 'C:\MassLynx\PCB.PRO\Results\5-151207C2-1210...	
08-Dec-15	16:38:48	Process Extract		
08-Dec-15	16:38:49	Process Integrate		
08-Dec-15	16:38:49	Process Calibrate		
08-Dec-15	16:38:50	Process Quantify		
08-Dec-15	16:38:54	Dataset Created		
08-Dec-15	16:41:58	Peak deleted	Sample:5-151207C28, Compound:13C-DiCB-F1, RT:11.646	
08-Dec-15	16:41:58	Peak deleted	Sample:5-151207C28, Compound:13C-DiCB-F1, RT:11.622	
08-Dec-15	16:44:00	Pre modification peak	Sample:5-151207C30, Compound:13C-MoCB-F1, RT:8.851	
08-Dec-15	16:44:00	Peak modified	Sample:5-151207C30, Compound:13C-MoCB-F1, RT:8.851	ES151208MB
08-Dec-15	16:49:03	Pre modification peak	Sample:5-151207C31, Compound:13C-MoCB-F1, RT:8.864	
08-Dec-15	16:49:03	Peak modified	Sample:5-151207C31, Compound:13C-MoCB-F1, RT:8.864	ES151208MB
14-Dec-15	16:51:13	Pre modification peak	Sample:5-151207C30, Compound:PeCB-F5, RT:25.461	
14-Dec-15	16:51:13	Peak modified	Sample:5-151207C30, Compound:PeCB-F5, RT:25.461	ES151214MB
14-Dec-15	16:51:13	Pre modification peak	Sample:5-151207C30, Compound:PeCB-F5, RT:25.461	
14-Dec-15	16:51:13	Peak modified	Sample:5-151207C30, Compound:PeCB-F5, RT:25.461	ES151214MB
08-Dec-15	16:53:10	Peak added	Sample:5-151207C31, Compound:13C-MoCB-F1, RT:10.391	ES151208MA
08-Dec-15	16:53:10	Peak added	Sample:5-151207C31, Compound:13C-MoCB-F1, RT:10.391	ES151208MA
14-Dec-15	16:57:50	Dataset Saved	Saved to 'C:\MassLynx\PCB.PRO\Results\5-151207C2-1210...	
08-Dec-15	18:20:11	Dataset Saved	Saved to 'C:\MassLynx\PCB.PRO\Results\5-151207C2.qld'	
08-Dec-15	18:21:01	Pre modification peak	Sample:5-151207C17, Compound:PeCB-F4, RT:19.110	
08-Dec-15	18:21:01	Peak modified	Sample:5-151207C17, Compound:PeCB-F4, RT:19.110	ES151208MB
08-Dec-15	18:21:29	Peak added	Sample:5-151207C17, Compound:PeCB-F4, RT:19.287	ES151208MJ
08-Dec-15	18:21:29	Peak added	Sample:5-151207C17, Compound:PeCB-F4, RT:19.295	ES151208MJ
08-Dec-15	18:23:15	Peak added	Sample:5-151207C17, Compound:PeCB-F4, RT:19.569	ES151208MJ
08-Dec-15	18:23:15	Peak added	Sample:5-151207C17, Compound:PeCB-F4, RT:19.569	ES151208MJ
08-Dec-15	18:24:02	Pre modification peak	Sample:5-151207C30, Compound:PeCB-F4, RT:19.154	
08-Dec-15	18:24:02	Peak modified	Sample:5-151207C30, Compound:PeCB-F4, RT:19.154	ES151208MJ
08-Dec-15	18:24:02	Pre modification peak	Sample:5-151207C30, Compound:PeCB-F4, RT:19.154	
08-Dec-15	18:24:02	Peak modified	Sample:5-151207C30, Compound:PeCB-F4, RT:19.154	ES151208MJ
08-Dec-15	18:24:37	Pre modification peak	Sample:5-151207C17, Compound:PeCB-F4, RT:21.626	
08-Dec-15	18:24:37	Peak modified	Sample:5-151207C17, Compound:PeCB-F4, RT:21.626	ES151208MJ
08-Dec-15	18:24:37	Pre modification peak	Sample:5-151207C17, Compound:PeCB-F4, RT:21.635	
08-Dec-15	18:24:37	Peak modified	Sample:5-151207C17, Compound:PeCB-F4, RT:21.635	ES151208MJ
08-Dec-15	18:24:58	Pre modification peak	Sample:5-151207C31, Compound:PeCB-F4, RT:21.688	
08-Dec-15	18:24:58	Peak modified	Sample:5-151207C31, Compound:PeCB-F4, RT:21.688	ES151208MJ
08-Dec-15	18:24:58	Pre modification peak	Sample:5-151207C31, Compound:PeCB-F4, RT:21.688	
08-Dec-15	18:24:58	Peak modified	Sample:5-151207C31, Compound:PeCB-F4, RT:21.688	ES151208MJ
08-Dec-15	18:25:19	Pre modification peak	Sample:5-151207C31, Compound:PeCB-F4, RT:21.273	
08-Dec-15	18:25:19	Peak modified	Sample:5-151207C31, Compound:PeCB-F4, RT:21.273	ES151208MJ
08-Dec-15	18:25:19	Pre modification peak	Sample:5-151207C31, Compound:PeCB-F4, RT:21.273	
08-Dec-15	18:25:19	Peak modified	Sample:5-151207C31, Compound:PeCB-F4, RT:21.273	ES151208MJ
08-Dec-15	18:25:27	Pre modification peak	Sample:5-151207C31, Compound:PeCB-F4, RT:21.688	
08-Dec-15	18:25:27	Peak modified	Sample:5-151207C31, Compound:PeCB-F4, RT:21.688	ES151208MJ
08-Dec-15	18:25:38	Pre modification peak	Sample:5-151207C31, Compound:PeCB-F4, RT:21.273	
08-Dec-15	18:25:38	Peak modified	Sample:5-151207C31, Compound:PeCB-F4, RT:21.273	ES151208MJ

**Quantify Audit Report MassLynx MassLynx V4.1 SCN 901**

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C2-1210ES.qld

Last Altered: Monday, December 14, 2015 16:51:27 Eastern Standard Time

Printed: Tuesday, December 15, 2015 11:27:07 Eastern Standard Time

Date	Time	Event	Details	Comments
08-Dec-15	18:25:52	Pre modification peak	Sample:5-151207C30, Compound:PeCB-F4, RT:21.273	
08-Dec-15	18:25:52	Peak modified	Sample:5-151207C30, Compound:PeCB-F4, RT:21.273	ES151208MJ
08-Dec-15	18:25:52	Pre modification peak	Sample:5-151207C30, Compound:PeCB-F4, RT:21.273	
08-Dec-15	18:25:52	Peak modified	Sample:5-151207C30, Compound:PeCB-F4, RT:21.273	ES151208MJ
08-Dec-15	18:26:05	Pre modification peak	Sample:5-151207C30, Compound:PeCB-F4, RT:21.600	
08-Dec-15	18:26:05	Peak modified	Sample:5-151207C30, Compound:PeCB-F4, RT:21.600	ES151208MJ
08-Dec-15	18:26:05	Pre modification peak	Sample:5-151207C30, Compound:PeCB-F4, RT:21.600	
08-Dec-15	18:26:05	Peak modified	Sample:5-151207C30, Compound:PeCB-F4, RT:21.600	ES151208MJ
08-Dec-15	18:26:30	Peak added	Sample:5-151207C17, Compound:PeCB-F4, RT:21.891	ES151208MA
08-Dec-15	18:26:30	Peak added	Sample:5-151207C17, Compound:PeCB-F4, RT:21.900	ES151208MA
08-Dec-15	18:27:13	Pre modification peak	Sample:5-151207C31, Compound:PeCB-F5, RT:22.995	
08-Dec-15	18:27:13	Peak modified	Sample:5-151207C31, Compound:PeCB-F5, RT:22.995	ES151208MS
08-Dec-15	18:27:13	Pre modification peak	Sample:5-151207C31, Compound:PeCB-F5, RT:22.995	
08-Dec-15	18:27:13	Peak modified	Sample:5-151207C31, Compound:PeCB-F5, RT:22.995	ES151208MS
08-Dec-15	18:27:55	Pre modification peak	Sample:5-151207C17, Compound:HxCB-F5, RT:24.697	
08-Dec-15	18:27:55	Peak modified	Sample:5-151207C17, Compound:HxCB-F5, RT:24.697	ES151208MJ
08-Dec-15	18:27:55	Pre modification peak	Sample:5-151207C17, Compound:HxCB-F5, RT:24.697	
08-Dec-15	18:27:55	Peak modified	Sample:5-151207C17, Compound:HxCB-F5, RT:24.697	ES151208MJ
08-Dec-15	18:28:49	Pre modification peak	Sample:5-151207C30, Compound:PeCB-F5, RT:22.995	
08-Dec-15	18:28:49	Peak modified	Sample:5-151207C30, Compound:PeCB-F5, RT:22.995	ES151208MS
08-Dec-15	18:28:49	Pre modification peak	Sample:5-151207C30, Compound:PeCB-F5, RT:22.995	
08-Dec-15	18:28:49	Peak modified	Sample:5-151207C30, Compound:PeCB-F5, RT:22.995	ES151208MS
08-Dec-15	18:29:10	Peak added	Sample:5-151207C30, Compound:PeCB-F5, RT:23.041	ES151208MS
08-Dec-15	18:29:10	Peak added	Sample:5-151207C30, Compound:PeCB-F5, RT:23.041	ES151208MS
08-Dec-15	18:29:46	Pre modification peak	Sample:5-151207C30, Compound:HxCB-F5, RT:24.616	
08-Dec-15	18:29:46	Peak modified	Sample:5-151207C30, Compound:HxCB-F5, RT:24.616	ES151208MJ
08-Dec-15	18:29:46	Pre modification peak	Sample:5-151207C30, Compound:HxCB-F5, RT:24.616	
08-Dec-15	18:29:46	Peak modified	Sample:5-151207C30, Compound:HxCB-F5, RT:24.616	ES151208MJ
08-Dec-15	18:30:49	Dataset Saved	Saved to 'C:\MassLynx\PCB.PRO\Results\5-151207C2-1208...	
11-Dec-15	18:40:43	Peak deleted	Sample:5-151207C30, Compound:TeCB-F4, RT:21.688	
11-Dec-15	18:41:12	Dataset Saved	Saved to 'C:\MassLynx\PCB.PRO\Results\5-151207C2-1210...	

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

**Method: C:\MassLynx\PCB.PRO\MethDB\1668-OCTYL-1-ICAL-151118A.mdb 02 Dec 2015 13:56:08****Calibration: C:\MassLynx\PCB.PRO\CurveDB\5-150917B-CAL5-OCTYL.cdb 19 Nov 2015 12:55:43****Name: 5-151207C18, Date: 08-Dec-2015, Time: 02:22:29, ID: H5-15-CCV-574, Description: 1668A-CS#3-015, Vial: Tray1:3**

	# Target Analyte	#Hom	Resp	Ion 1 Area	Ion 2 Area	Ra	Ra Fail=Y...	RT	RRT	RT L...	RT U...	Conc.	%Rec	Mod.	Comment	Noise 1	Noise 2
1	1 PCB-1		45	528110	2051791	3.06	NO	8.86	1.00	8.83	8.90	51.761	103.5			742	630
2	2 PCB-3		47	502399	50404	3.13	NO	10.39	1.00	10.36	10.42	50.710	101.4			742	630
3	3 PCB-4		46	543030		1.51	NO	10.56	1.00	10.53	10.60	46.937	93.9			1039	4825
4	4 PCB-15		46	643853		1.52	NO	14.23	1.00	14.20	14.27	48.114	96.2			1098	3608
5	5 PCB-19		49	612750		1.05	NO	12.57	1.00	12.54	12.60	48.778	97.6			1382	1603
6	6 PCB-37		46	618654		1.01	NO	18.18	1.00	18.14	18.21	49.311	98.6			4025	3286
7	7 PCB-54		49	816738		0.80	NO	14.42	1.00	14.39	14.46	48.975	98.0			676	370
8	8 PCB-81		52	830434		0.76	NO	21.75	1.00	21.72	21.78	51.120	102.2			949	770
9	9 PCB-77		50	807144		0.76	NO	22.05	1.00	22.02	22.08	49.181	98.4			949	770
10	10 PCB-104		58	498344		1.58	NO	17.48	1.00	17.45	17.52	50.992	102.0			425	524
11	11 PCB-123		48	466301		1.56	NO	23.05	1.00	23.02	23.09	51.401	102.8			1435	1138
12	12 PCB-118		50	502269		1.58	NO	23.23	1.00	23.19	23.26	51.180	102.4			1435	1138
13	13 PCB-114		51	495732		1.59	NO	23.52	1.00	23.48	23.55	50.851	101.7			1435	1138
14	14 PCB-105		50	499974		1.56	NO	23.86	1.00	23.83	23.90	51.109	102.2			1435	1138
15	15 PCB-126		51	573694		1.55	NO	25.45	1.00	25.42	25.48	50.836	101.7			1435	1138
16	16 PCB-155		52	630841		1.27	NO	20.48	1.00	20.45	20.51	50.808	101.6			414	251
17	17 PCB-167		58	712843		1.24	NO	26.35	1.00	26.32	26.39	49.254	98.5			1791	1450
18	18 PCB-156/157		110	1444582		1.23	NO	26.98	1.00	26.94	27.01	97.858	97.9			1791	1450
19	19 PCB-169		53	702244		1.25	NO	28.62	1.00	28.59	28.66	49.425	98.8			1791	1450
20	20 PCB-188		48	721301	12023	1.02	NO	23.47	1.00	23.44	23.50	49.542	99.1			1906	2614
21	21 PCB-189		44	558058	2546	1.03	NO	29.90	1.00	29.87	29.93	50.467	100.9			3209	2582
22	22 PCB-202		51	775853		0.90	NO	26.24	1.00	26.20	26.27	50.657	101.3			448	456
23	23 PCB-205		43	559312		0.90	NO	31.29	1.00	31.25	31.32	52.030	104.1			1540	2423
24	24 PCB-208		50	609093	46226	0.79	NO	29.64	1.00	29.61	29.68	53.856	107.7			860	1402
25	25 PCB-206		48	414120		0.79	NO	32.36	1.00	32.32	32.39	55.217	110.4			860	1402
26	26 PCB-209		42	368854		1.19	NO	33.48	1.00	33.45	33.51	51.763	103.5			135	128
27	27 13C-PCB-31		105	1338848		1.04	NO	15.76	0.87	15.73	15.79	84.320	84.3			16754	7861
28	28 13C-PCB-95		57	536701		1.59	NO	19.07	1.09	19.04	19.11	82.474	82.5			1197	827
29	29 13C-PCB-153		80	1006020		1.29	NO	24.14	1.18	24.11	24.17	92.056	92.1			2378	1544
30	30 13C-PCB-28		194	1484941		1.05	NO	15.93	0.94	15.90	15.96	109.231	109.2			16754	7861
31	31 13C-PCB-111		142	926044	30234	1.60	NO	21.98	1.07	21.95	22.01	107.575	107.6			1197	827
32	32 13C-PCB-178		98	1057378		1.07	NO	25.02	1.01	24.99	25.05	116.172	116.2			1584	1194
33	33 13C-PCB-1		105	1153881	2051791	3.15	NO	8.86	0.75	8.83	8.90	84.995	85.0			1436	5804
34	34 13C-PCB-3		96	1073498	50404	3.09	NO	10.38	0.88	10.34	10.41	86.077	86.1			1436	5804

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

Name: 5-151207C18, Date: 08-Dec-2015, Time: 02:22:29, ID: H5-15-CCV-574, Description: 1668A-CS#3-015, Vial: Tray1:3

	# Target Analyte	#Hom	Resp	Ion 1 Area	Ion 2 Area	Ra	Ra Fail=Y...	RT	RRT	RT L...	RT U...	Conc.	%Rec	Mod.	Comment	Noise 1	Noise 2
35	35 13C-PCB-4		65	1141114		1.59	NO	10.55	0.89	10.52	10.58	99.016	99.0			7963	1474
36	36 13C-PCB-15		77	1364373		1.59	NO	14.22	1.20	14.19	14.26	77.245	77.2			12922	2670
37	37 13C-PCB-19		56	1238541		1.05	NO	12.56	1.06	12.52	12.59	123.921	123.9			29270	16512
38	38 13C-PCB-37		170	1312745		1.04	NO	18.16	1.07	18.13	18.19	93.664	93.7			16754	7861
39	39 13C-PCB-54		192	1677047		0.80	NO	14.41	0.85	14.37	14.44	154.832	154.8			4250	2176
40	40 13C-PCB-81		164	1557376		0.79	NO	21.74	1.06	21.71	21.77	100.360	100.4			2921	1916
41	41 13C-PCB-77		167	1590096		0.78	NO	22.04	1.07	22.01	22.07	93.183	93.2			2921	1916
42	42 13C-PCB-104		131	862878		1.57	NO	17.48	1.03	17.44	17.51	106.196	106.2			660	547
43	43 13C-PCB-123		148	962039		1.61	NO	23.04	1.12	23.01	23.07	105.806	105.8			2606	2399
44	44 13C-PCB-118		153	1002805		1.60	NO	23.21	1.13	23.18	23.25	104.146	104.1			2606	2399
45	45 13C-PCB-114		147	962369		1.60	NO	23.50	0.95	23.47	23.54	106.416	106.4			2606	2399
46	46 13C-PCB-105		150	976168		1.61	NO	23.85	0.96	23.82	23.88	106.156	106.2			2606	2399
47	47 13C-PCB-126		170	1102082		1.61	NO	25.44	1.02	25.40	25.47	118.264	118.3			2606	2399
48	48 13C-PCB-155		163	1222835		1.26	NO	20.47	0.99	20.44	20.50	119.546	119.5			645	570
49	49 13C-PCB-167		124	1205462		1.29	NO	26.34	1.06	26.31	26.37	102.224	102.2			2378	1544
50	50 13C-PCB-156/157		262	2550710		1.29	NO	26.97	1.09	26.93	27.00	211.227	105.6			2378	1544
51	51 13C-PCB-169		134	1307932		1.29	NO	28.61	1.15	28.58	28.64	106.432	106.4			2378	1544
52	52 13C-PCB-188		138	1502729		1.04	NO	23.46	0.94	23.42	23.49	105.666	105.7			1584	1194
53	53 13C-PCB-189		116	1255021		1.06	NO	29.89	0.96	29.85	29.92	87.847	87.8			2176	3094
54	54 13C-PCB-202		129	1510384		0.91	NO	26.23	1.06	26.19	26.26	137.934	137.9			895	1148
55	55 13C-PCB-205		142	1322090		0.89	NO	31.26	1.01	31.23	31.29	101.260	101.3			2475	2088
56	56 13C-PCB-208		124	1222071		0.78	NO	29.63	0.96	29.60	29.66	111.967	112.0			1118	1642
57	57 13C-PCB-206		88	874469		0.78	NO	32.33	1.04	32.30	32.36	111.082	111.1			1118	1642
58	58 13C-PCB-209		109	878862		1.18	NO	33.46	1.08	33.43	33.50	104.886	104.9			183	195
59	59 13C-PCB-9		4567044	1780890		1.56	NO	11.82	0.48	11.79	11.85	168.643	168.6			7963	1474
60	60 13C-PCB-52		1572317	874927		0.80	NO	16.93	0.68	16.90	16.97	118.162	118.2			2947	1727
61	61 13C-PCB-101		1697695	660319		1.57	NO	20.59	0.83	20.56	20.63	135.730	135.7			1197	827
62	62 13C-PCB-138		2231629	969060		1.30	NO	24.82	0.00	24.79	24.86	177.374	177.4			2378	1544
63	63 13C-PCB-194		1761403	935199		0.88	NO	30.99	1.25	30.96	31.03	169.922	169.9			2475	2088

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

Name: 5-151207C19, Date: 08-Dec-2015, Time: 03:02:08, ID: WG2225462-2, Description: LCS, Vial: Tray1:15

	# Target Analyte	#Hom	Resp	Ion 1 Area	Ion 2 Area	Ra	Ra Fail=Y...	RT	RRT	RT L...	RT U...	Conc.	%Rec	Mod.	Comment	Noise 1	Noise 2
1	1 PCB-1		988	83740		3.14	NO	8.86	1.00	8.83	8.90	1142.352	114.2			680	500
2	2 PCB-3		989	78255		3.15	NO	10.39	1.00	10.36	10.42	1063.203	106.3			680	500
3	3 PCB-4		1016	92405		1.50	NO	10.56	1.00	10.53	10.60	1032.887	103.3			1965	4708
4	4 PCB-15		950	123415		1.53	NO	14.23	1.00	14.20	14.27	995.639	99.6			1246	3356
5	5 PCB-19		1091	104514		1.06	NO	12.57	1.00	12.54	12.60	1075.831	107.6			1344	1487
6	6 PCB-37		879	208335	97939	1.01	NO	18.17	1.00	18.13	18.20	935.216	93.5			1815	2214
7	7 PCB-54		1055	156964		0.77	NO	14.42	1.00	14.39	14.46	1060.559	106.1			535	439
8	8 PCB-81		1098	307915		0.75	NO	21.75	1.00	21.72	21.78	1069.608	107.0			949	786
9	9 PCB-77		1031	307302		0.75	NO	22.05	1.00	22.02	22.08	1010.370	101.0			949	786
10	10 PCB-104		1154	173134		1.61	NO	17.48	1.00	17.45	17.52	1015.308	101.5			322	539
11	11 PCB-123		1061	191532		1.58	NO	23.05	1.00	23.02	23.09	1144.851	114.5			1023	748
12	12 PCB-118		1100	203407		1.58	NO	23.23	1.00	23.19	23.26	1131.700	113.2			1023	748
13	13 PCB-114		1134	201457		1.58	NO	23.52	1.00	23.48	23.55	1123.775	112.4			1023	748
14	14 PCB-105		1095	202413		1.58	NO	23.86	1.00	23.83	23.90	1113.714	111.4			1023	748
15	15 PCB-126		1092	223833		1.63	NO	25.45	1.00	25.42	25.48	1090.970	109.1			1023	748
16	16 PCB-155		1068	235564		1.27	NO	20.48	1.00	20.45	20.51	1046.624	104.7			398	268
17	17 PCB-167		1244	286955		1.24	NO	26.35	1.00	26.32	26.39	1062.024	106.2			701	659
18	18 PCB-156/157		2376	591058		1.23	NO	26.98	1.00	26.94	27.01	2107.095	105.4			701	659
19	19 PCB-169		1116	295119		1.23	NO	28.62	1.00	28.59	28.66	1045.870	104.6			701	659
20	20 PCB-188		1020	283885	1214	1.02	NO	23.47	1.00	23.44	23.50	1063.065	106.3			1196	861
21	21 PCB-189		1010	252938		1.01	NO	29.90	1.00	29.87	29.93	1163.789	116.4			2162	1881
22	22 PCB-202		1113	308939		0.89	NO	26.24	1.00	26.20	26.27	1105.498	110.5			346	304
23	23 PCB-205		934	234444		0.90	NO	31.27	1.00	31.24	31.31	1137.051	113.7			646	579
24	24 PCB-208		1045	251948	32221	0.78	NO	29.64	1.00	29.61	29.68	1122.262	112.2			713	977
25	25 PCB-206		1101	185611		0.80	NO	32.34	1.00	32.31	32.38	1278.025	127.8			713	977
26	26 PCB-209		966	158959		1.20	NO	33.48	1.00	33.45	33.51	1189.866	119.0			119	164
27	27 13C-PCB-31		20	3134		1.17	NO	15.76	0.87	15.73	15.79	16.201	0.8			17415	8035
28	28 13C-PCB-95														805	672	
29	29 13C-PCB-153		18	4122		1.31	NO	24.14	1.18	24.11	24.17	20.169	1.0			1074	859
30	30 13C-PCB-28		1885	421006		1.07	NO	15.93	0.94	15.90	15.96	1062.465	53.1			17415	8035
31	31 13C-PCB-111		2113	366997		1.59	NO	21.98	1.07	21.95	22.01	1605.586	80.3			805	672
32	32 13C-PCB-178		1603	427639		1.06	NO	25.02	1.01	24.99	25.05	1903.041	95.2			1009	588
33	33 13C-PCB-1		703	166185		3.23	NO	8.85	0.75	8.82	8.88	569.773	28.5			1070	5936
34	34 13C-PCB-3		658	160013		3.11	NO	10.38	0.88	10.34	10.41	588.739	29.4			1070	5936
35	35 13C-PCB-4		455	172481		1.63	NO	10.55	0.89	10.52	10.58	696.984	34.8			7584	1671
36	36 13C-PCB-15		660	252641		1.61	NO	14.22	1.20	14.19	14.26	659.007	33.0			12094	1891
37	37 13C-PCB-19		395	191092		1.06	NO	12.56	1.06	12.52	12.59	877.814	43.9			22142	14725

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

Name: 5-151207C19, Date: 08-Dec-2015, Time: 03:02:08, ID: WG2225462-2, Description: LCS, Vial: Tray1:15

	# Target Analyte	#Hom	Resp	Ion 1 Area	Ion 2 Area	Ra	Ra Fail=Y...	RT	RRT	RT L...	RT U...	Conc.	%Rec	Mod.	Comment	Noise 1	Noise 2
38	38 13C-PCB-37		2060	466577		1.04	NO	18.16	1.07	18.13	18.19	1133.437	56.7			17415	8035
39	39 13C-PCB-54		1141	293692		0.80	NO	14.41	0.85	14.37	14.44	921.914	46.1			3387	2380
40	40 13C-PCB-81		2184	547301		0.79	NO	21.74	1.06	21.71	21.77	1338.594	66.9			3129	1722
41	41 13C-PCB-77		2321	581466		0.79	NO	22.04	1.07	22.01	22.07	1296.923	64.8			3129	1722
42	42 13C-PCB-104		1741	303712		1.58	NO	17.48	1.03	17.44	17.51	1413.480	70.7			640	530
43	43 13C-PCB-123		2076	359402		1.60	NO	23.04	1.12	23.01	23.07	1487.221	74.4			2098	1852
44	44 13C-PCB-118		2125	371094		1.57	NO	23.21	1.13	23.18	23.25	1442.816	72.1			2098	1852
45	45 13C-PCB-114		2041	355282		1.58	NO	23.50	0.95	23.47	23.54	1474.612	73.7			2098	1852
46	46 13C-PCB-105		2124	368188		1.59	NO	23.85	0.96	23.82	23.88	1504.712	75.2			2098	1852
47	47 13C-PCB-126		2400	416684		1.59	NO	25.44	1.02	25.40	25.47	1673.986	83.7			2098	1852
48	48 13C-PCB-155		2226	441090		1.27	NO	20.47	0.99	20.44	20.50	1636.663	81.8			709	467
49	49 13C-PCB-167		1879	448559		1.30	NO	26.34	1.06	26.31	26.37	1551.926	77.6			1074	859
50	50 13C-PCB-156/157		4040	973490		1.28	NO	26.97	1.09	26.93	27.00	3262.915	81.6			1074	859
51	51 13C-PCB-169		2152	514551		1.29	NO	28.61	1.15	28.58	28.64	1704.826	85.2			1074	859
52	52 13C-PCB-188		2050	547070		1.06	NO	23.46	0.94	23.42	23.49	1574.963	78.7			1009	588
53	53 13C-PCB-189		1839	493108		1.05	NO	29.89	0.96	29.85	29.92	1395.236	69.8			3969	1792
54	54 13C-PCB-202		1912	548819		0.91	NO	26.23	1.06	26.19	26.26	2039.829	102.0			555	1144
55	55 13C-PCB-205		2170	507247		0.88	NO	31.26	1.01	31.23	31.29	1552.438	77.6			1524	1348
56	56 13C-PCB-208		1951	483678	32221	0.77	NO	29.63	0.96	29.60	29.66	1767.462	88.4			652	899
57	57 13C-PCB-206		1379	340971		0.78	NO	32.33	1.04	32.30	32.36	1731.100	86.6			652	899
58	58 13C-PCB-209		1646	332066		1.18	NO	33.46	1.08	33.43	33.50	1585.799	79.3			200	141
59	59 13C-PCB-9		1997390	768081		1.60	NO	11.82	0.48	11.79	11.85	73.756	3.7			7584	1671
60	60 13C-PCB-52		925773	513415		0.80	NO	16.93	0.68	16.90	16.97	69.573	3.5			2893	1438
61	61 13C-PCB-101		898616	345229		1.60	NO	20.59	0.83	20.56	20.63	71.844	3.6			805	672
62	62 13C-PCB-138		1097091	476608		1.30	NO	24.82	0.00	24.79	24.86	87.199	4.4			1074	859
63	63 13C-PCB-194		879508	466798		0.88	NO	30.99	1.25	30.96	31.03	84.846	4.2			1524	1348

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

Name: 5-151207C32, Date: 08-Dec-2015, Time: 11:35:53, ID: H5-15-CCV-575, Description: 1668A-CS#3-015, Vial: Tray1:3

	# Target Analyte	#Hom	Resp	Ion 1 Area	Ion 2 Area	Ra	Ra Fail=Y...	RT	RRT	RT L...	RT U...	Conc.	%Rec	Mod.	Comment	Noise 1	Noise 2
1	1 PCB-1		45	409990	14530	3.13	NO	8.88	1.00	8.84	8.91	51.718	103.4			729	531
2	2 PCB-3		47	373807	27038	3.13	NO	10.39	1.00	10.36	10.42	50.077	100.2			729	531
3	3 PCB-4		45	425159		1.53	NO	10.56	1.00	10.53	10.60	46.201	92.4			977	2290
4	4 PCB-15		48	513558		1.52	NO	14.23	1.00	14.20	14.27	50.211	100.4			2593	2667
5	5 PCB-19		48	507074	48339	1.07	NO	12.57	1.00	12.54	12.60	47.761	95.5			4947	4768
6	6 PCB-37		50	504235	67825	1.00	NO	18.18	1.00	18.14	18.21	53.547	107.1			6462	8046
7	7 PCB-54		48	654247		0.79	NO	14.42	1.00	14.39	14.46	47.931	95.9			2799	2677
8	8 PCB-81		52	739189		0.76	NO	21.76	1.00	21.73	21.79	51.067	102.1			2869	2900
9	9 PCB-77		50	732698		0.77	NO	22.06	1.00	22.03	22.09	49.177	98.4			2869	2900
10	10 PCB-104		56	460452	181870	1.59	NO	17.48	1.00	17.45	17.52	49.649	99.3			1323	1035
11	11 PCB-123		47	439195		1.56	NO	23.05	1.00	23.02	23.09	50.958	101.9			1770	1457
12	12 PCB-118		51	474130		1.57	NO	23.23	1.00	23.19	23.26	52.406	104.8			1770	1457
13	13 PCB-114		51	463052		1.56	NO	23.53	1.00	23.49	23.56	50.732	101.5			1770	1457
14	14 PCB-105		50	469977		1.56	NO	23.87	1.00	23.84	23.91	51.355	102.7			1770	1457
15	15 PCB-126		51	439776		1.55	NO	25.45	1.00	25.42	25.48	50.923	101.8			1770	1457
16	16 PCB-155		51	564851		1.26	NO	20.48	1.00	20.45	20.51	49.742	99.5			718	571
17	17 PCB-167		58	640853		1.24	NO	26.36	1.00	26.33	26.40	49.360	98.7			1207	1361
18	18 PCB-156/157		110	1245692		1.23	NO	26.98	1.00	26.94	27.01	97.649	97.6			1207	1361
19	19 PCB-169		53	580940		1.23	NO	28.62	1.00	28.59	28.66	49.330	98.7			1207	1361
20	20 PCB-188		47	680914		1.02	NO	23.48	1.00	23.45	23.51	48.958	97.9			2014	1889
21	21 PCB-189		44	466681		1.02	NO	29.90	1.00	29.87	29.93	51.258	102.5			3137	2943
22	22 PCB-202		50	745191		0.90	NO	26.24	1.00	26.20	26.27	50.052	100.1			491	509
23	23 PCB-205		42	494548		0.89	NO	31.29	1.00	31.25	31.32	51.422	102.8			822	1425
24	24 PCB-208		50	485212		0.80	NO	29.64	1.00	29.61	29.68	53.298	106.6			812	1181
25	25 PCB-206		47	369224		0.79	NO	32.36	1.00	32.32	32.39	54.834	109.7			812	1181
26	26 PCB-209		42	325387		1.18	NO	33.48	1.00	33.45	33.51	51.694	103.4			277	318
27	27 13C-PCB-31		103	1047004	19979	1.06	NO	15.77	0.87	15.74	15.80	82.931	82.9			13517	3976
28	28 13C-PCB-95		48	429502		1.58	NO	19.07	1.09	19.04	19.11	70.092	70.1			1254	1073
29	29 13C-PCB-153		86	930433		1.30	NO	24.15	1.18	24.12	24.19	98.241	98.2			1994	1686
30	30 13C-PCB-28		180	1196084	34239	1.05	NO	15.94	0.94	15.91	15.97	101.668	101.7			13517	3976
31	31 13C-PCB-111		132	846308		1.57	NO	21.99	1.07	21.95	22.02	100.174	100.2			1254	1073
32	32 13C-PCB-178		101	1007528	43707	1.06	NO	25.03	1.01	25.00	25.07	120.406	120.4			1200	1150
33	33 13C-PCB-1		108	920790	14530	3.11	NO	8.86	0.75	8.83	8.90	87.263	87.3			1569	11202
34	34 13C-PCB-3		94	816481	27038	3.06	NO	10.39	0.88	10.36	10.42	84.302	84.3			1569	11202
35	35 13C-PCB-4		67	908962		1.60	NO	10.55	0.89	10.52	10.58	103.199	103.2			9506	1663
36	36 13C-PCB-15		77	1046872		1.58	NO	14.22	1.20	14.19	14.26	76.729	76.7			8305	2134
37	37 13C-PCB-19		62	1048491		1.07	NO	12.56	1.06	12.52	12.59	137.078	137.1			11869	5356

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

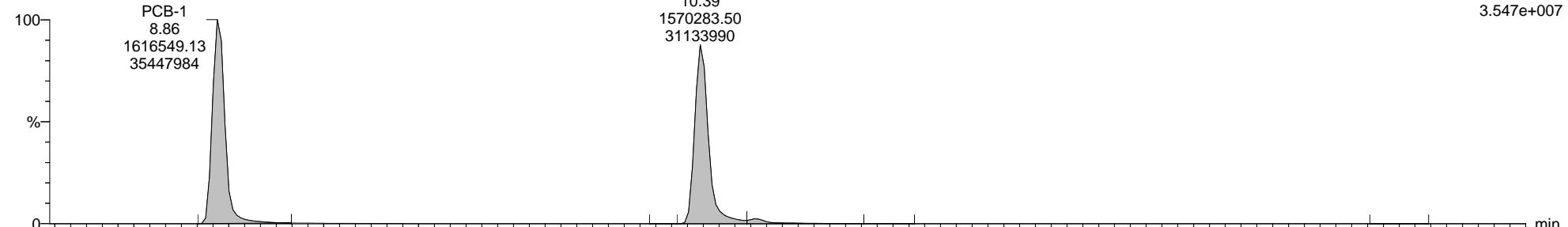
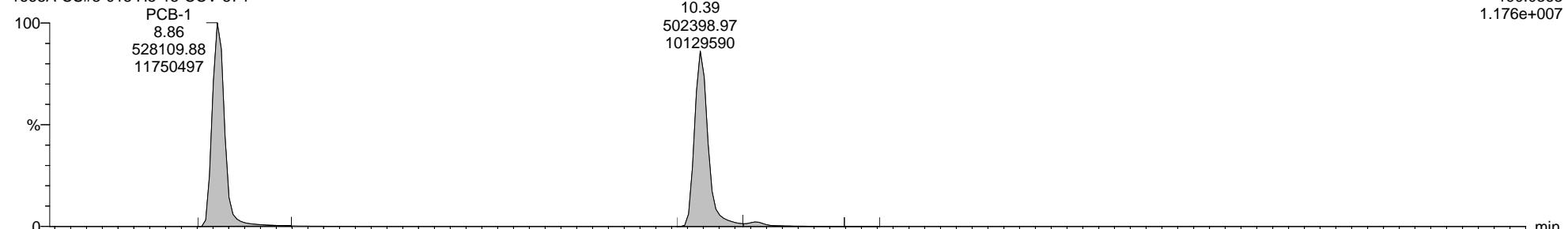
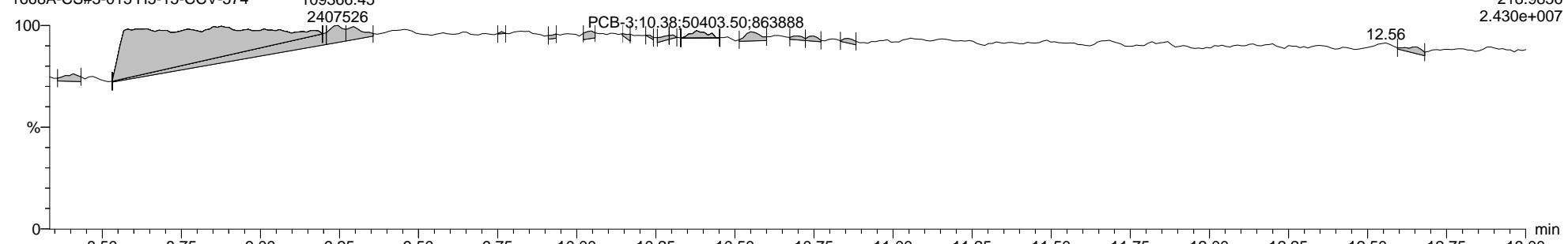
Name: 5-151207C32, Date: 08-Dec-2015, Time: 11:35:53, ID: H5-15-CCV-575, Description: 1668A-CS#3-015, Vial: Tray1:3

	# Target Analyte	#Hom	Resp	Ion 1 Area	Ion 2 Area	Ra	Ra Fail=Y...	RT	RRT	RT L...	RT U...	Conc.	%Rec	Mod.	Comment	Noise 1	Noise 2
38	38 13C-PCB-37		148	981327	76599	1.05	NO	18.17	1.07	18.13	18.20	81.337	81.3			13517	3976
39	39 13C-PCB-54		181	1369427		0.79	NO	14.41	0.85	14.37	14.44	146.012	146.0			1267	1068
40	40 13C-PCB-81		150	1394855		0.78	NO	21.74	1.06	21.71	21.77	92.198	92.2			1756	1891
41	41 13C-PCB-77		156	1452988		0.78	NO	22.04	1.07	22.01	22.07	87.364	87.4			1756	1891
42	42 13C-PCB-104		128	809823	181870	1.61	NO	17.48	1.03	17.44	17.51	103.859	103.9			730	518
43	43 13C-PCB-123		144	922287		1.58	NO	23.04	1.12	23.01	23.07	103.301	103.3			2237	2303
44	44 13C-PCB-118		145	925613		1.58	NO	23.21	1.13	23.18	23.25	98.274	98.3			2237	2303
45	45 13C-PCB-114		140	895841		1.58	NO	23.52	0.95	23.48	23.55	101.234	101.2			2237	2303
46	46 13C-PCB-105		144	919971		1.59	NO	23.86	0.96	23.83	23.90	102.112	102.1			2237	2303
47	47 13C-PCB-126		133	852146		1.59	NO	25.44	1.02	25.40	25.47	93.009	93.0			2237	2303
48	48 13C-PCB-155		152	1118933		1.25	NO	20.47	0.99	20.44	20.50	112.047	112.0			503	530
49	49 13C-PCB-167		121	1083160		1.29	NO	26.34	1.06	26.31	26.37	100.301	100.3			1994	1686
50	50 13C-PCB-156/157		247	2205044		1.29	NO	26.97	1.09	26.93	27.00	199.219	99.6			1994	1686
51	51 13C-PCB-169		120	1071131		1.30	NO	28.62	1.15	28.59	28.66	95.418	95.4			1994	1686
52	52 13C-PCB-188		144	1431342		1.05	NO	23.46	0.94	23.42	23.49	110.264	110.3			1200	1150
53	53 13C-PCB-189		104	1033745	8884	1.05	NO	29.89	0.96	29.85	29.92	78.757	78.8			2030	1362
54	54 13C-PCB-202		137	1479865		0.90	NO	26.23	1.06	26.19	26.26	146.416	146.4			711	905
55	55 13C-PCB-205		157	1167782		0.89	NO	31.27	1.01	31.24	31.31	112.464	112.5			1788	1362
56	56 13C-PCB-208		125	986990		0.78	NO	29.63	0.96	29.60	29.66	113.261	113.3			1279	1829
57	57 13C-PCB-206		99	784428		0.78	NO	32.33	1.04	32.30	32.36	124.783	124.8			1279	1829
58	58 13C-PCB-209		120	775762		1.18	NO	33.46	1.08	33.43	33.50	115.552	115.6			245	395
59	59 13C-PCB-9		3514313	1368393		1.57	NO	11.82	0.48	11.79	11.85	129.770	129.8			9506	1663
60	60 13C-PCB-52		1358137	756876	38920	0.79	NO	16.93	0.68	16.90	16.97	102.066	102.1			1495	1044
61	61 13C-PCB-101		1652086	639706		1.58	NO	20.60	0.83	20.57	20.64	132.083	132.1			1254	1073
62	62 13C-PCB-138		2044288	894928		1.28	NO	24.82	0.00	24.79	24.86	162.484	162.5			1994	1686
63	63 13C-PCB-194		1407864	744215		0.89	NO	30.99	1.25	30.96	31.03	135.816	135.8			1788	1362

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

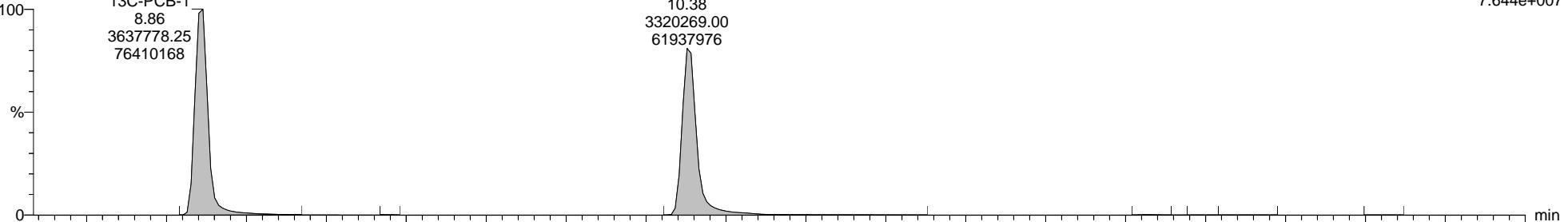
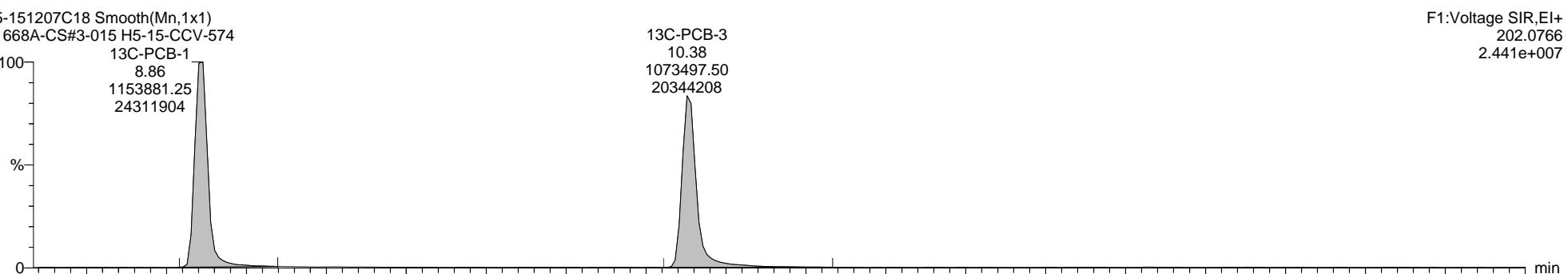
**Method: C:\MassLynx\PCB.PRO\MethDB\1668-OCTYL-1-ICAL-151118A.mdb 02 Dec 2015 13:56:08****Calibration: C:\MassLynx\PCB.PRO\CurveDB\5-150917B-CAL5-OCTYL.cdb 19 Nov 2015 12:55:43****Name: 5-151207C18, Date: 08-Dec-2015, Time: 02:22:29, ID: H5-15-CCV-574, Description: 1668A-CS#3-015, Vial: Tray1:3****PCB-1**5-151207C18 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-5745-151207C18 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-5745-151207C18 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-574

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

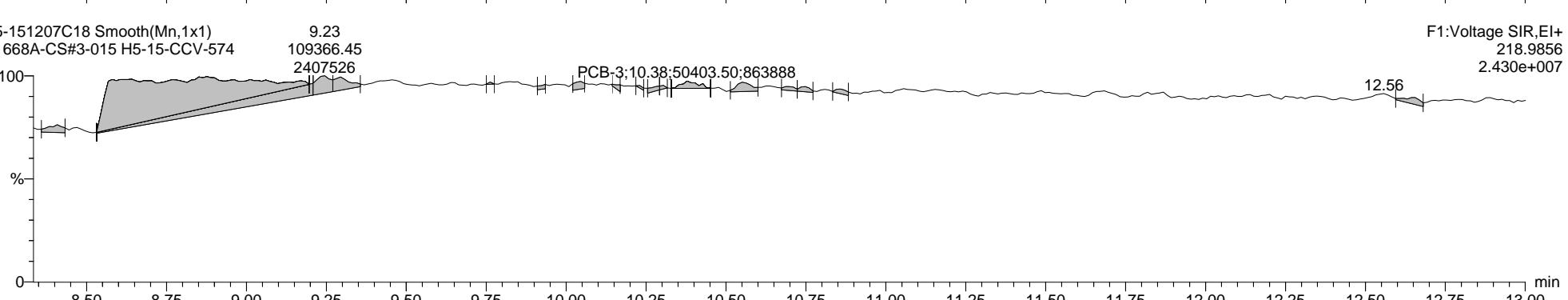
Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

Name: 5-151207C18, Date: 08-Dec-2015, Time: 02:22:29, ID: H5-15-CCV-574, Description: 1668A-CS#3-015, Vial: Tray1:3

**13C-PCB-1**5-151207C18 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-57413C-PCB-1  
8.86  
3637778.25  
7641016813C-PCB-3  
10.38  
3320269.00  
61937976F1:Voltage SIR,EI+  
200.0795  
7.644e+0075-151207C18 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-57413C-PCB-1  
8.86  
1153881.25  
2431190413C-PCB-3  
10.38  
1073497.50  
20344208F1:Voltage SIR,EI+  
202.0766  
2.441e+0075-151207C18 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-5749.23  
109366.45  
2407526

PCB-3;10.38;50403.50;863888

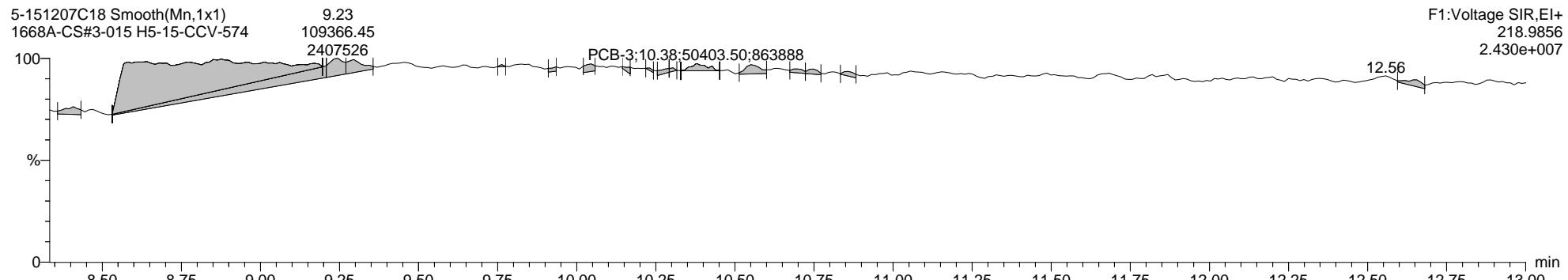
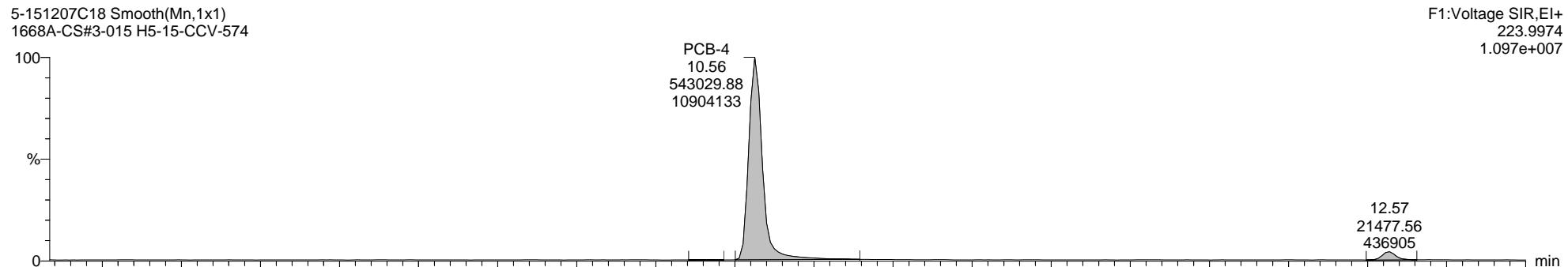
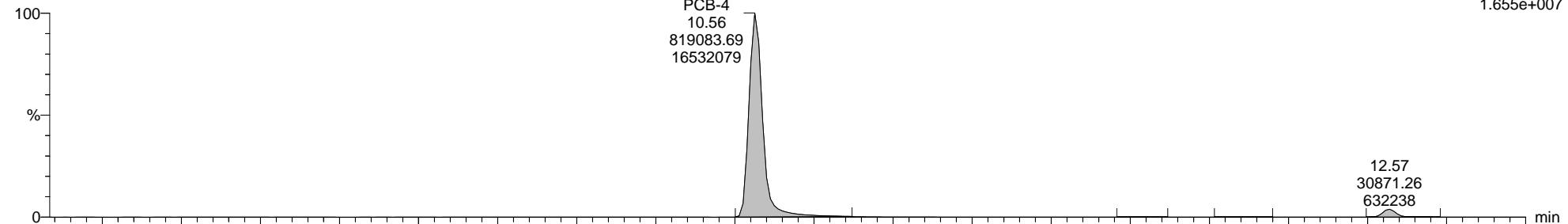
F1:Voltage SIR,EI+  
218.9856  
2.430e+007

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

Name: 5-151207C18, Date: 08-Dec-2015, Time: 02:22:29, ID: H5-15-CCV-574, Description: 1668A-CS#3-015, Vial: Tray1:3

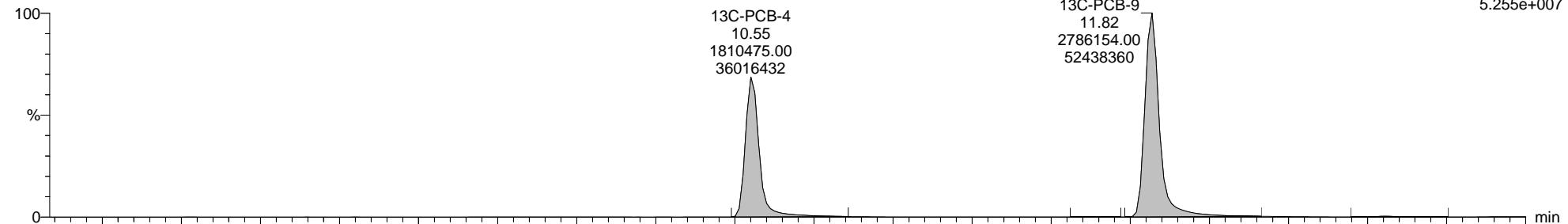
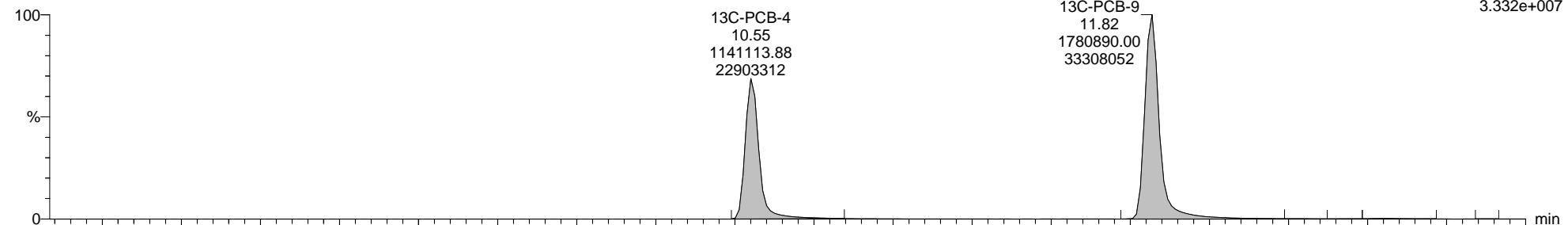
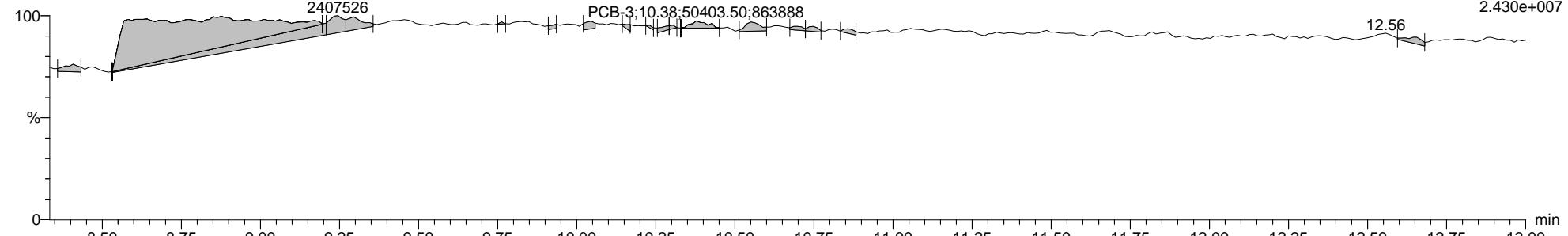
**PCB-4**5-151207C18 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-574

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

Name: 5-151207C18, Date: 08-Dec-2015, Time: 02:22:29, ID: H5-15-CCV-574, Description: 1668A-CS#3-015, Vial: Tray1:3

**13C-PCB-4**5-151207C18 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-5745-151207C18 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-5745-151207C18 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-574

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

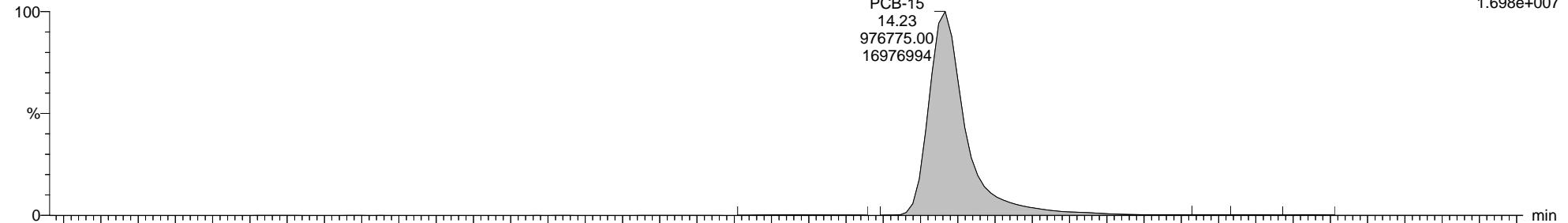
Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

Name: 5-151207C18, Date: 08-Dec-2015, Time: 02:22:29, ID: H5-15-CCV-574, Description: 1668A-CS#3-015, Vial: Tray1:3

### PCB-15

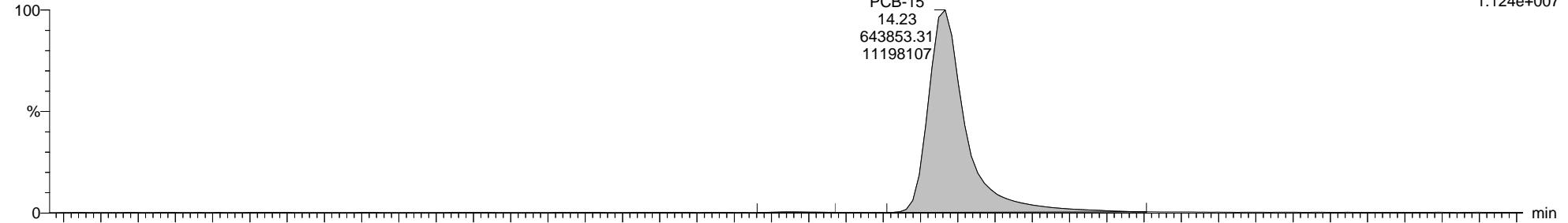
5-151207C18 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-574

F2:Voltage SIR,EI+  
222.0003  
1.698e+007



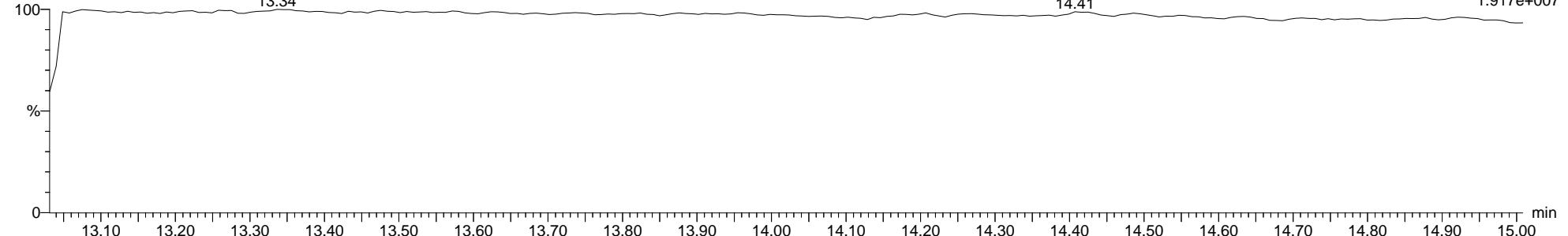
5-151207C18 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-574

F2:Voltage SIR,EI+  
223.9974  
1.124e+007



5-151207C18 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-574

F2:Voltage SIR,EI+  
242.9856  
1.917e+007

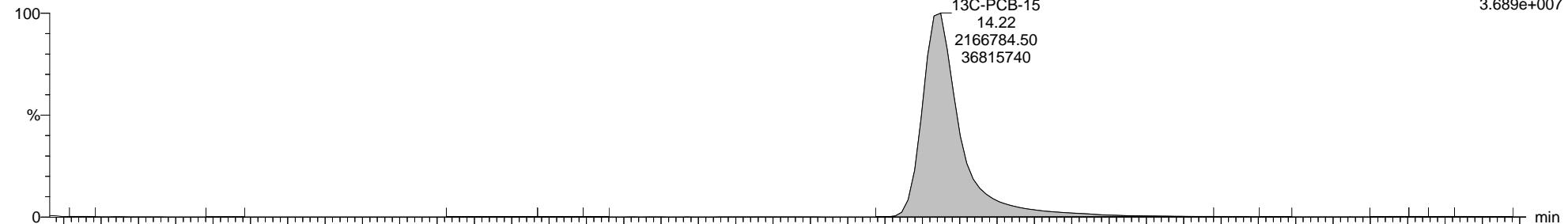
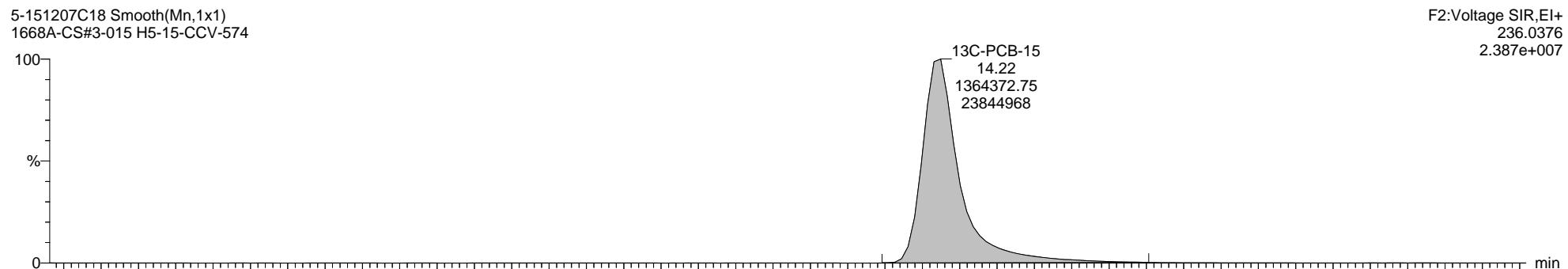
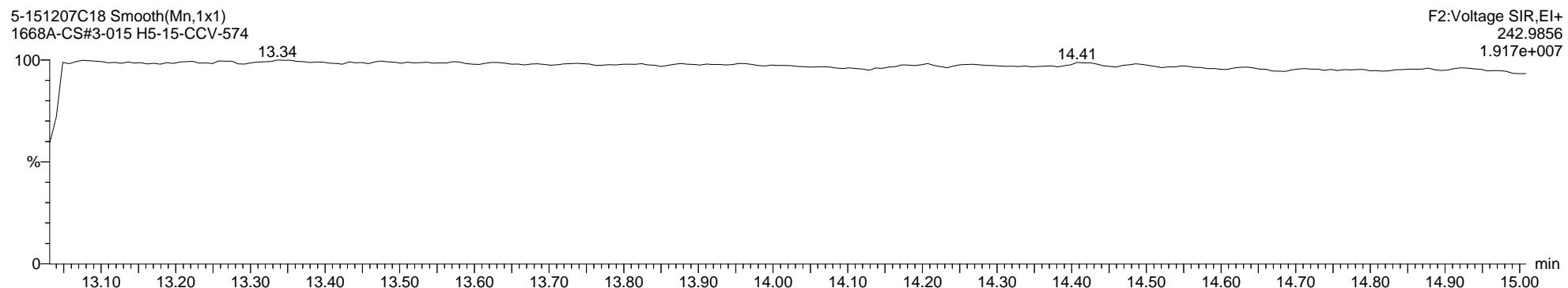


Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

Name: 5-151207C18, Date: 08-Dec-2015, Time: 02:22:29, ID: H5-15-CCV-574, Description: 1668A-CS#3-015, Vial: Tray1:3

**13C-PCB-15**5-151207C18 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-5745-151207C18 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-5745-151207C18 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-574

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

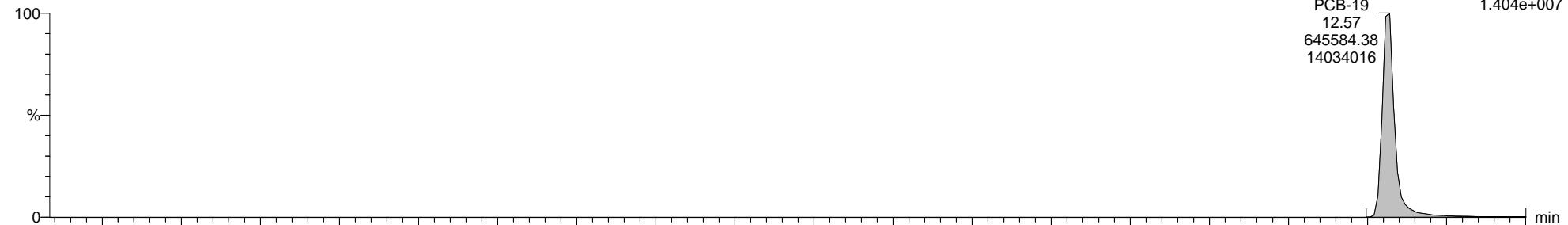
Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

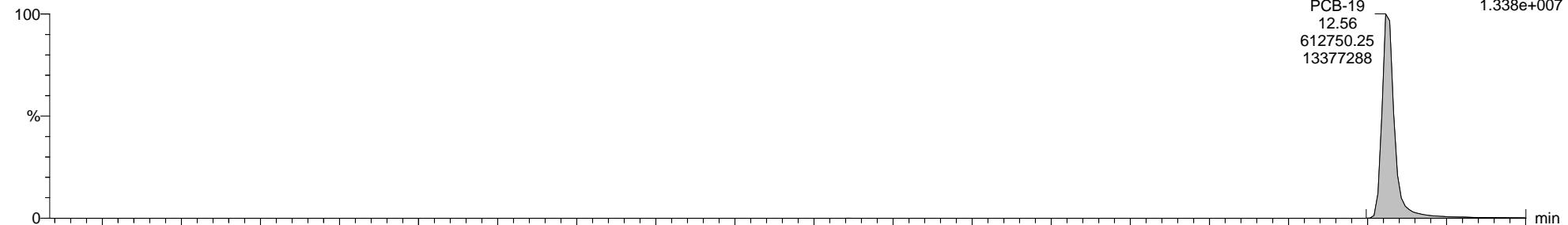
Name: 5-151207C18, Date: 08-Dec-2015, Time: 02:22:29, ID: H5-15-CCV-574, Description: 1668A-CS#3-015, Vial: Tray1:3

### PCB-19

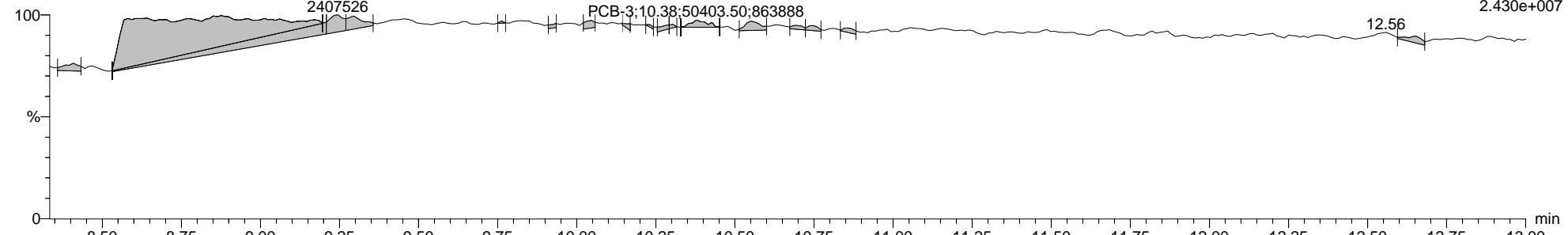
5-151207C18  
1668A-CS#3-015 H5-15-CCV-574



5-151207C18  
1668A-CS#3-015 H5-15-CCV-574



5-151207C18 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-574

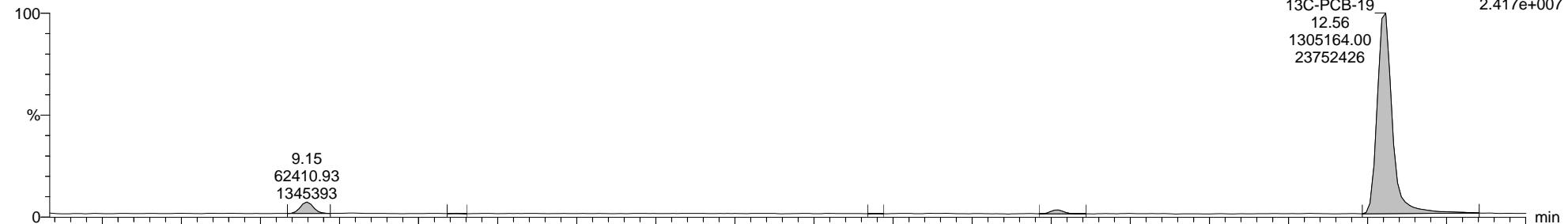
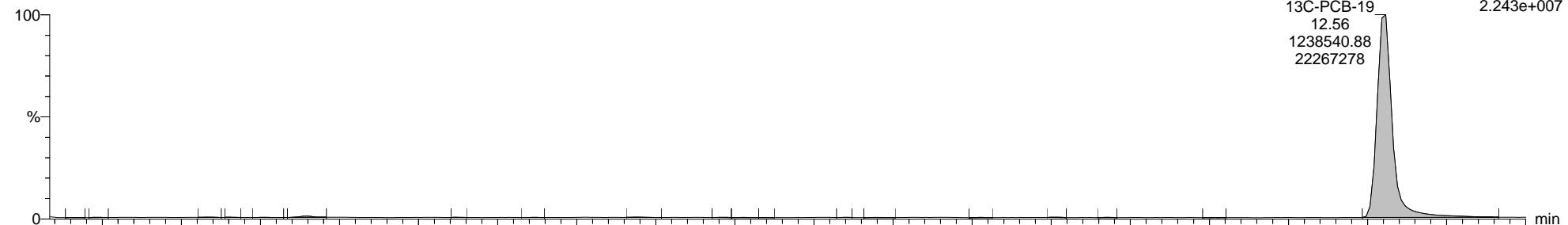
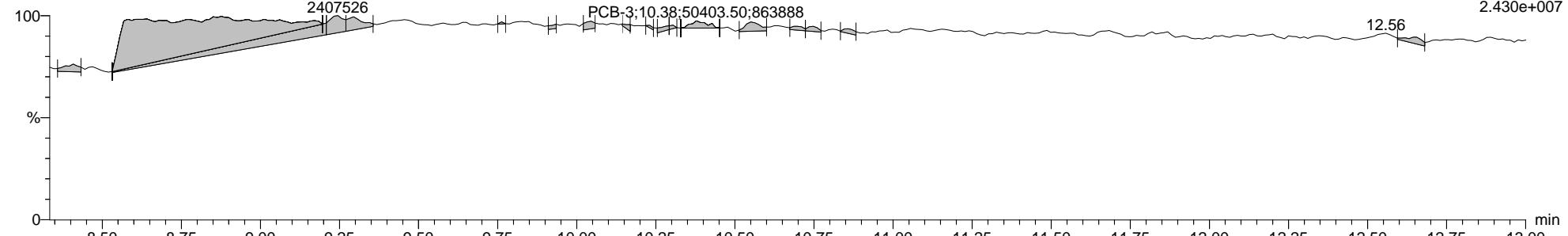


Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

Name: 5-151207C18, Date: 08-Dec-2015, Time: 02:22:29, ID: H5-15-CCV-574, Description: 1668A-CS#3-015, Vial: Tray1:3

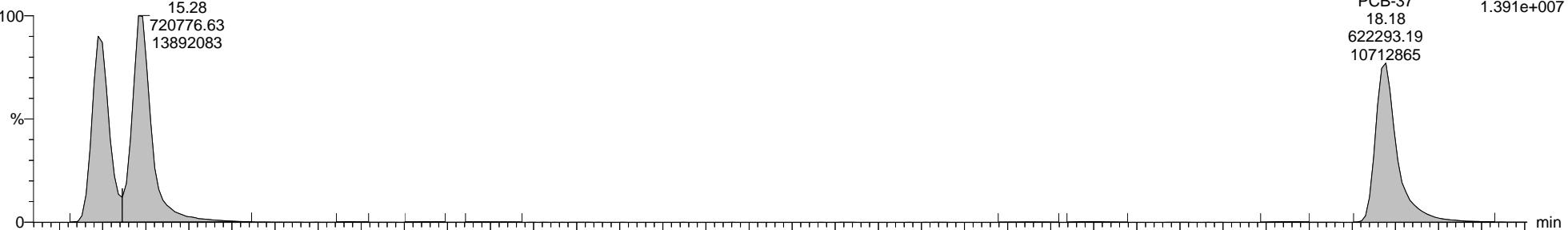
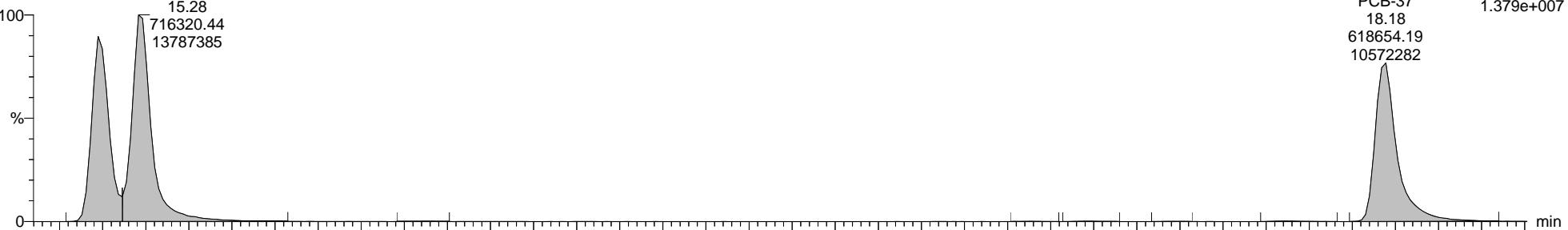
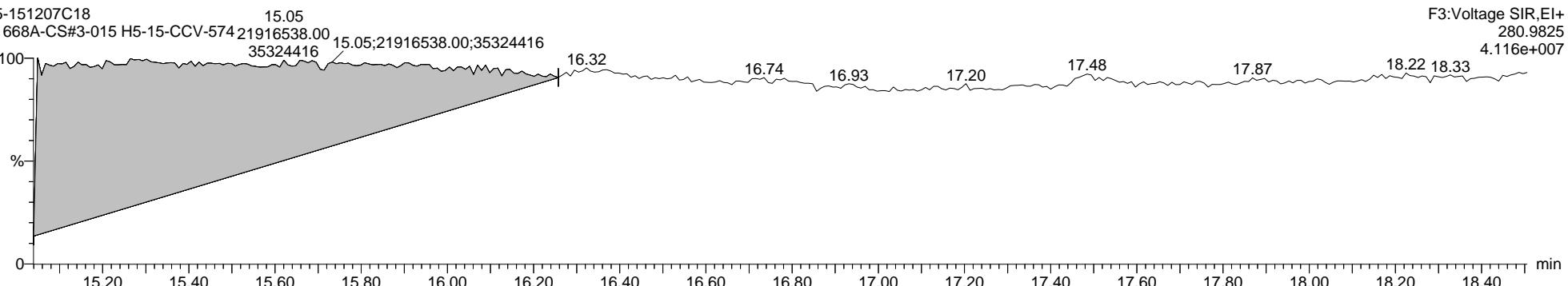
**13C-PCB-19**5-151207C18 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-5745-151207C18 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-5745-151207C18 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-574

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

Name: 5-151207C18, Date: 08-Dec-2015, Time: 02:22:29, ID: H5-15-CCV-574, Description: 1668A-CS#3-015, Vial: Tray1:3

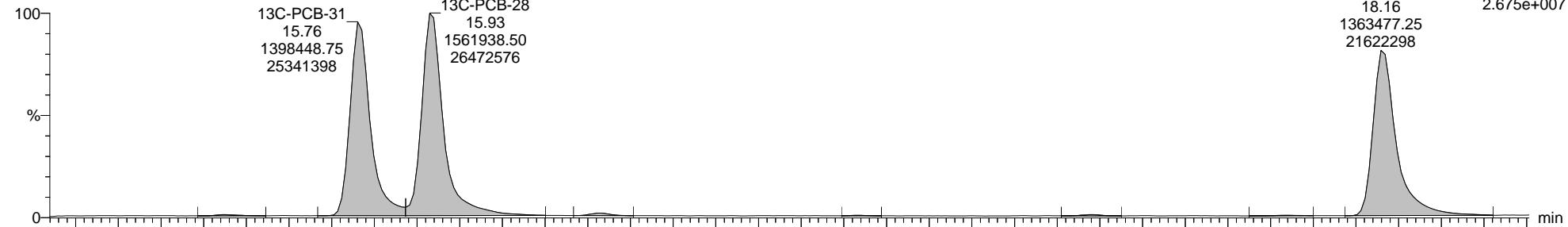
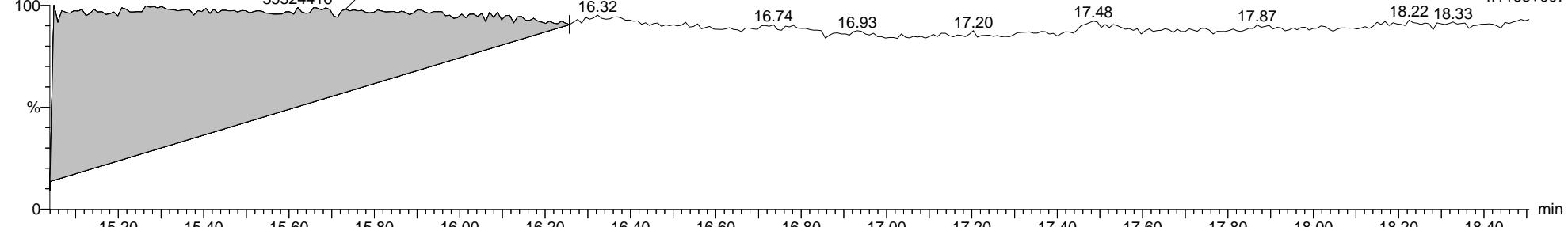
**PCB-37**5-151207C18  
1668A-CS#3-015 H5-15-CCV-5745-151207C18  
1668A-CS#3-015 H5-15-CCV-5745-151207C18  
1668A-CS#3-015 H5-15-CCV-574 15.05  
21916538.00 35324416 15.05;21916538.00;35324416

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

Name: 5-151207C18, Date: 08-Dec-2015, Time: 02:22:29, ID: H5-15-CCV-574, Description: 1668A-CS#3-015, Vial: Tray1:3

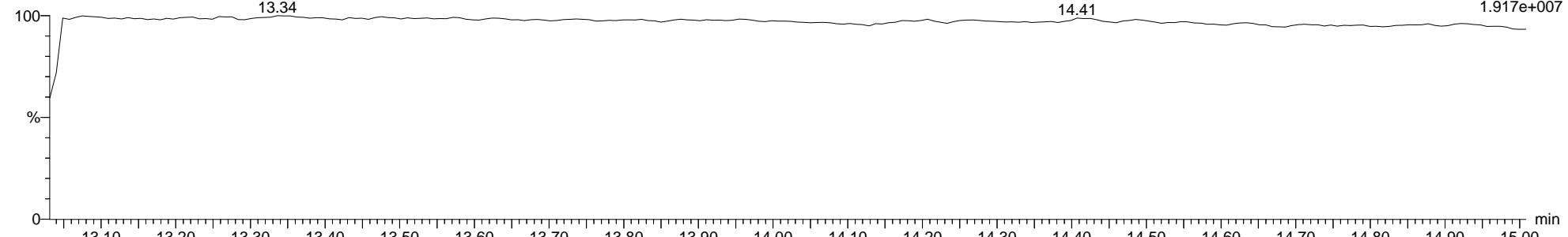
**13C-PCB-37**5-151207C18 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-5745-151207C18 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-5745-151207C18  
1668A-CS#3-015 H5-15-CCV-574 15.05  
21916538.00 15.05;21916538.00;35324416

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

Name: 5-151207C18, Date: 08-Dec-2015, Time: 02:22:29, ID: H5-15-CCV-574, Description: 1668A-CS#3-015, Vial: Tray1:3

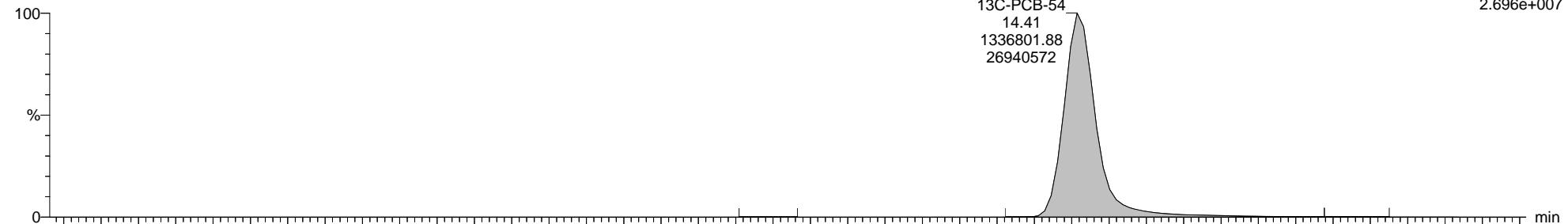
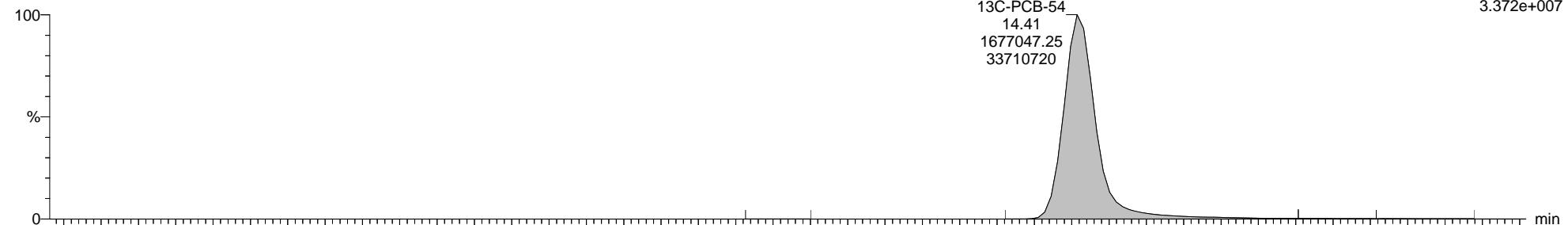
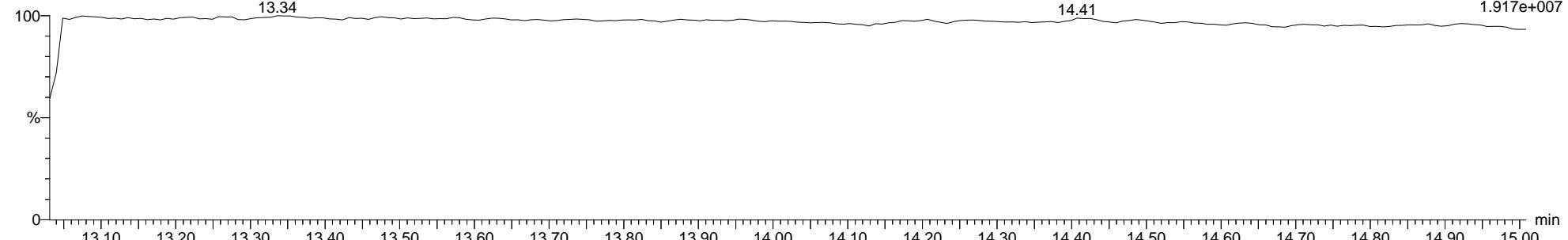
**PCB-54**5-151207C18 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-5745-151207C18 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-5745-151207C18 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-574

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

Name: 5-151207C18, Date: 08-Dec-2015, Time: 02:22:29, ID: H5-15-CCV-574, Description: 1668A-CS#3-015, Vial: Tray1:3

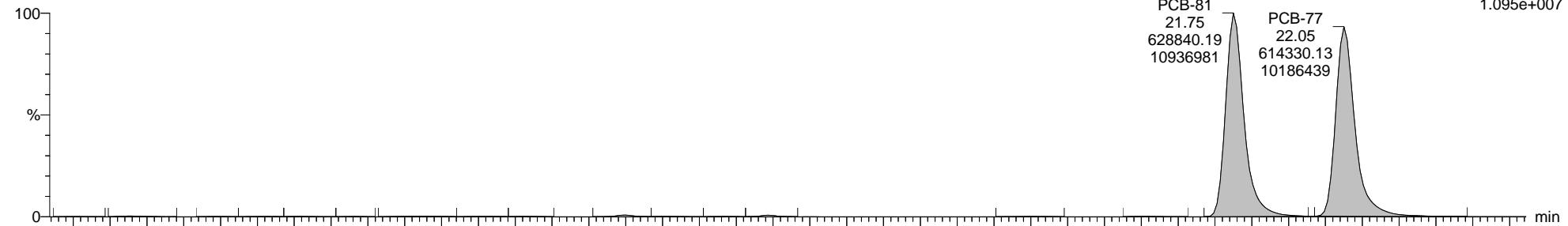
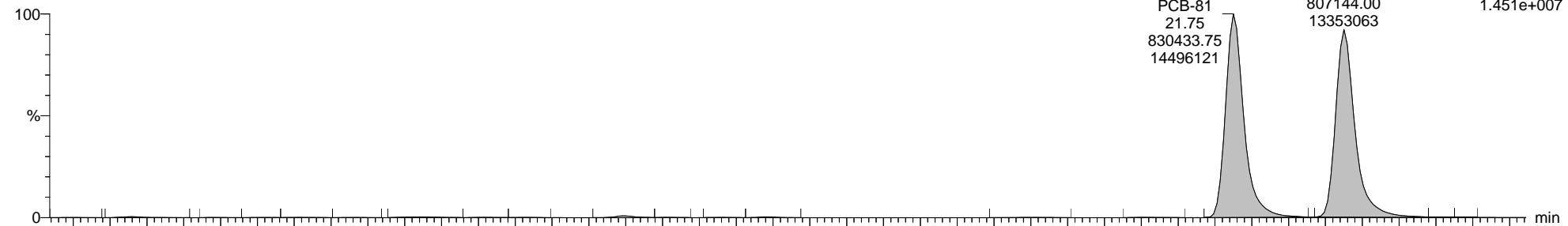
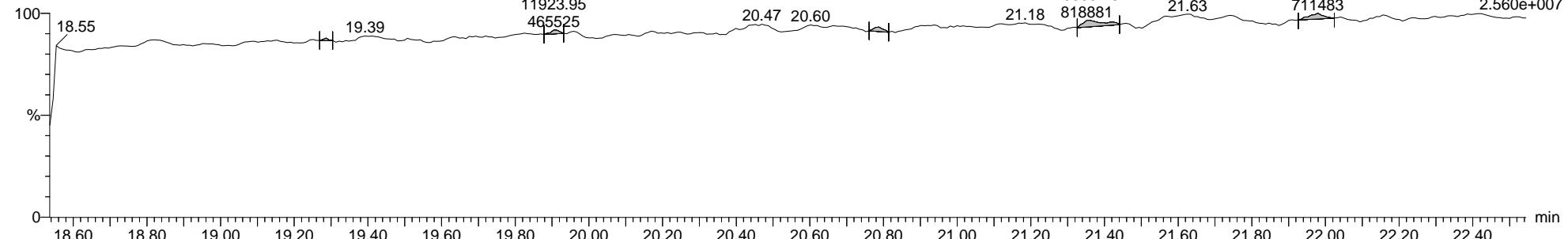
**13C-PCB-54**5-151207C18 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-5745-151207C18 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-5745-151207C18 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-574

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

Name: 5-151207C18, Date: 08-Dec-2015, Time: 02:22:29, ID: H5-15-CCV-574, Description: 1668A-CS#3-015, Vial: Tray1:3

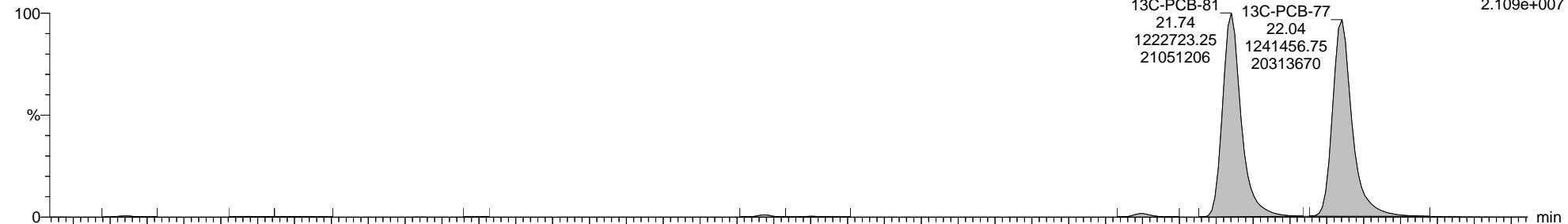
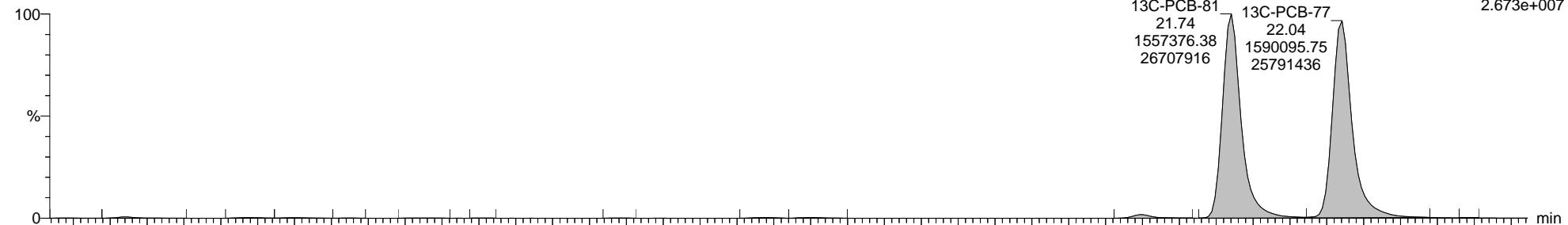
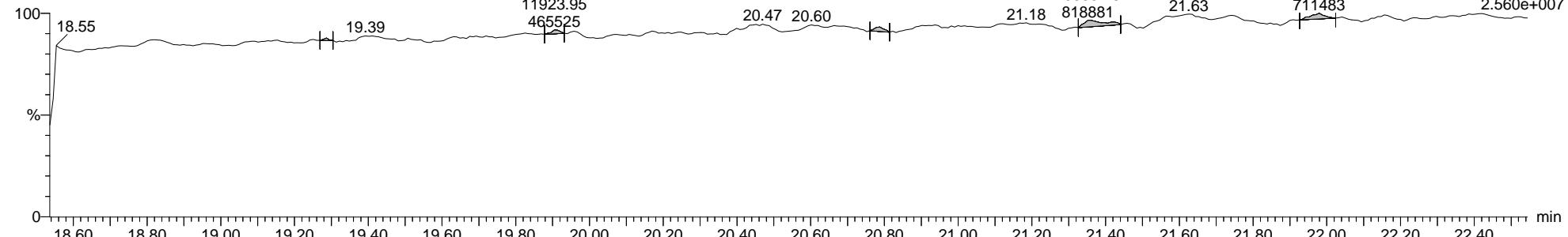
**PCB-81**5-151207C18 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-5745-151207C18 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-5745-151207C18 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-574

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

Name: 5-151207C18, Date: 08-Dec-2015, Time: 02:22:29, ID: H5-15-CCV-574, Description: 1668A-CS#3-015, Vial: Tray1:3

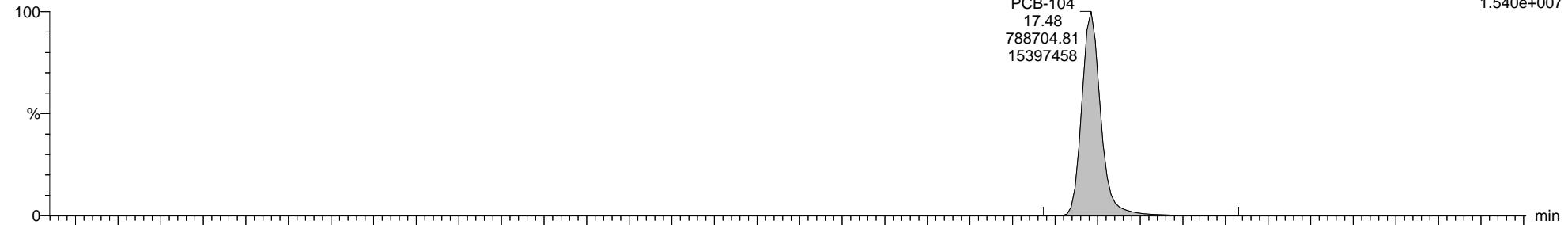
**13C-PCB-81**5-151207C18 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-5745-151207C18 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-5745-151207C18 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-574

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

Name: 5-151207C18, Date: 08-Dec-2015, Time: 02:22:29, ID: H5-15-CCV-574, Description: 1668A-CS#3-015, Vial: Tray1:3

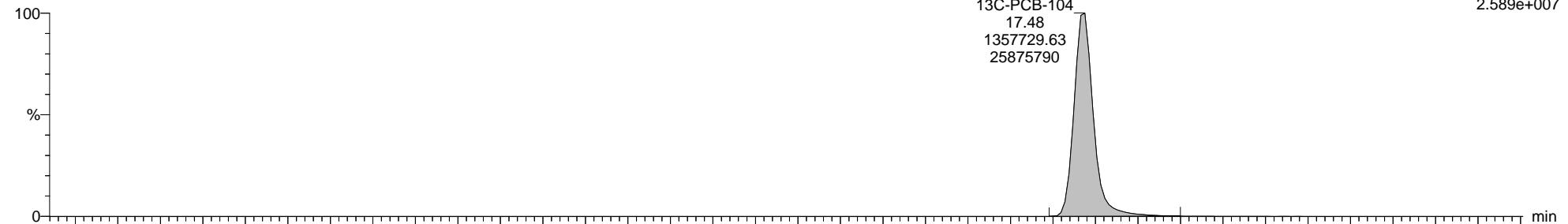
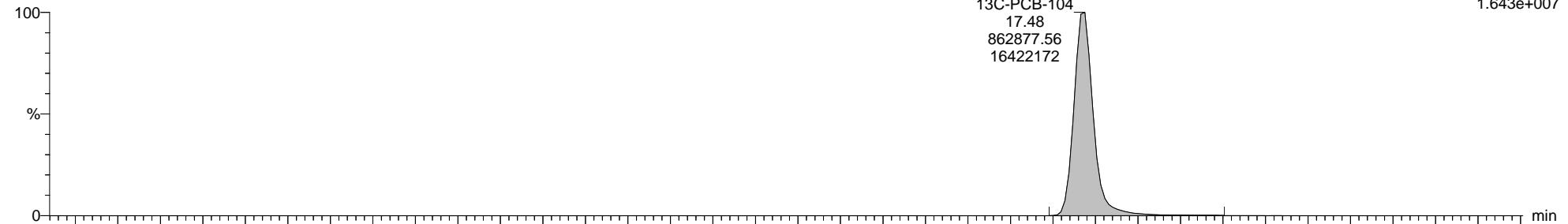
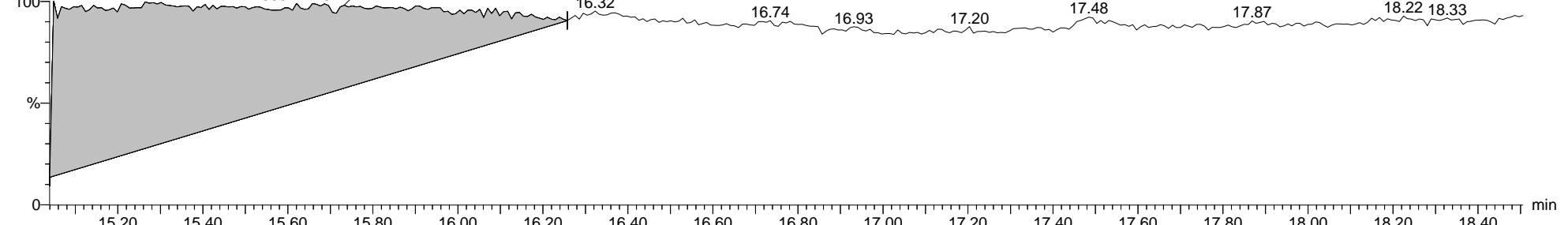
**PCB-104**5-151207C18 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-574

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

Name: 5-151207C18, Date: 08-Dec-2015, Time: 02:22:29, ID: H5-15-CCV-574, Description: 1668A-CS#3-015, Vial: Tray1:3

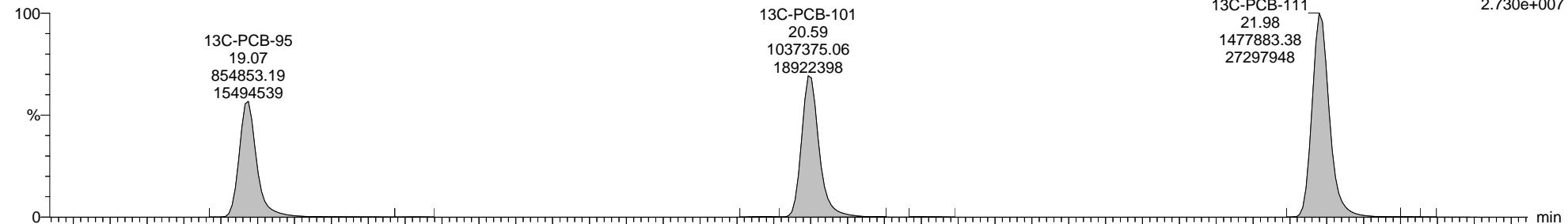
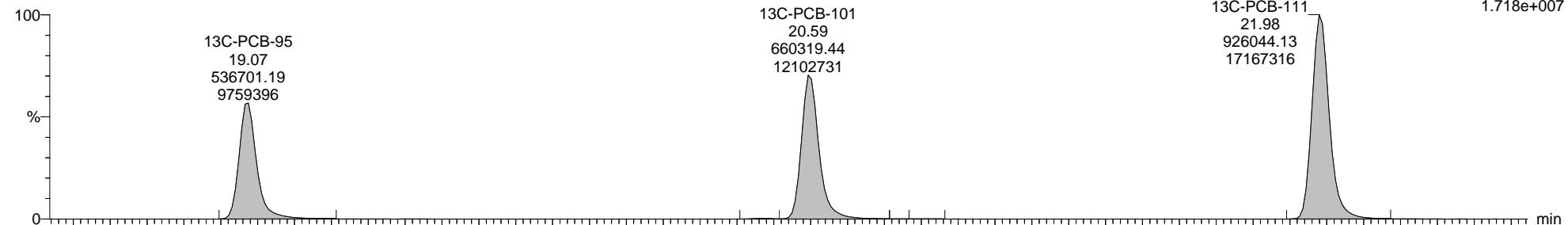
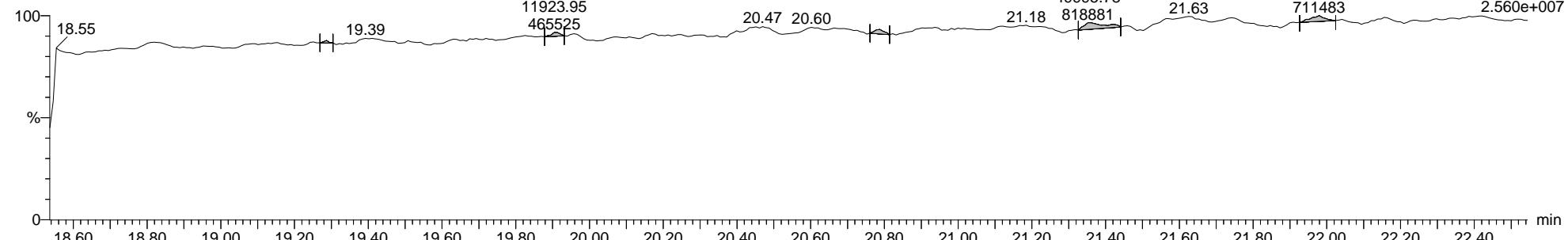
**13C-PCB-104**5-151207C18 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-5745-151207C18 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-5745-151207C18  
1668A-CS#3-015 H5-15-CCV-574 21916538.00  
15.05 35324416 15.05;21916538.00;35324416

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

Name: 5-151207C18, Date: 08-Dec-2015, Time: 02:22:29, ID: H5-15-CCV-574, Description: 1668A-CS#3-015, Vial: Tray1:3

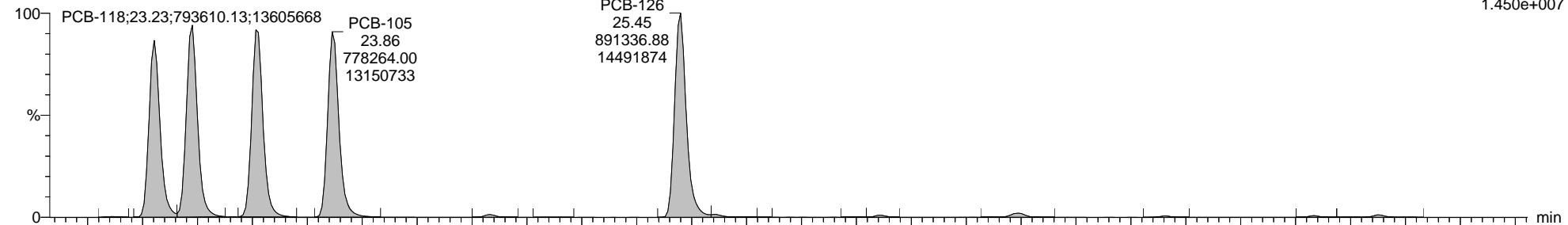
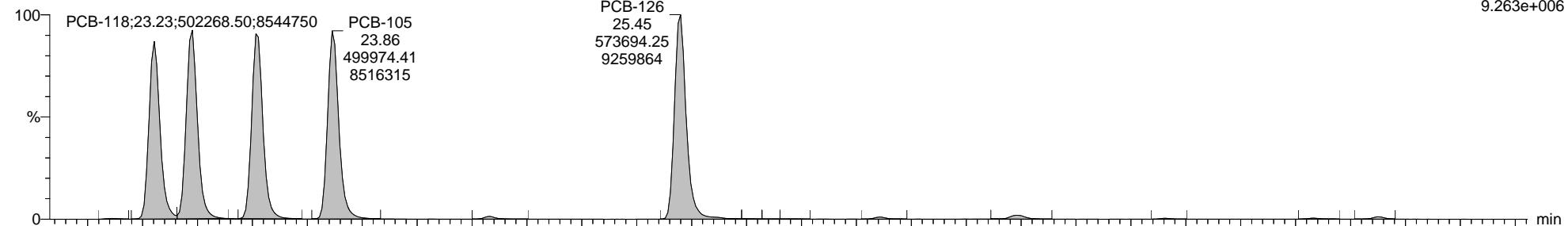
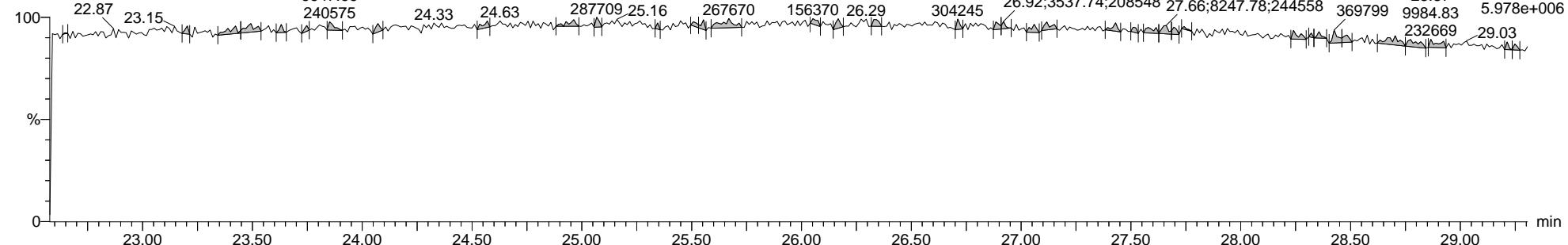
**13C-PCB-111**5-151207C18 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-5745-151207C18 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-5745-151207C18 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-574

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

Name: 5-151207C18, Date: 08-Dec-2015, Time: 02:22:29, ID: H5-15-CCV-574, Description: 1668A-CS#3-015, Vial: Tray1:3

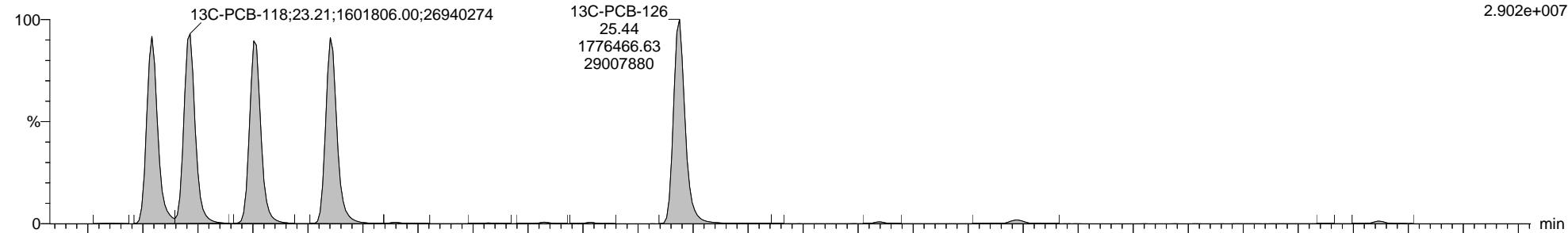
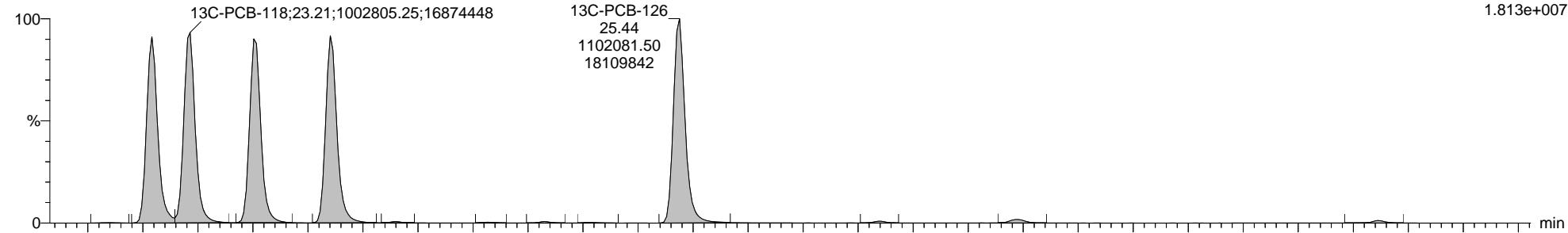
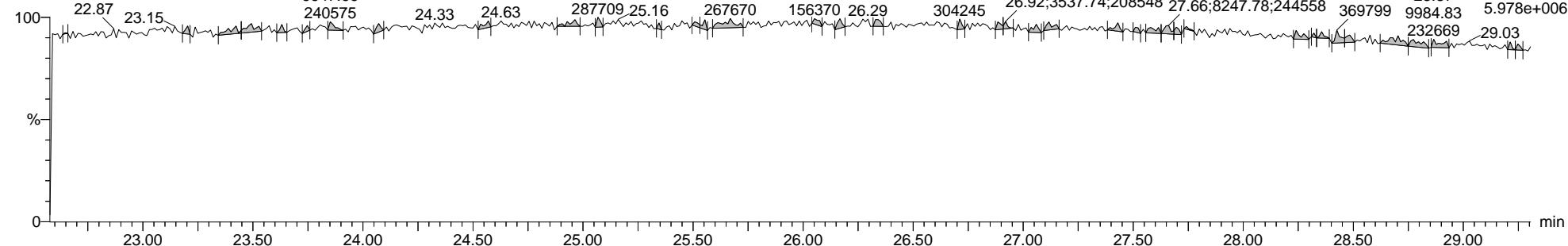
**PCB-123**5-151207C18 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-5745-151207C18 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-5745-151207C18  
1668A-CS#3-015 H5-15-CCV-574

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

Name: 5-151207C18, Date: 08-Dec-2015, Time: 02:22:29, ID: H5-15-CCV-574, Description: 1668A-CS#3-015, Vial: Tray1:3

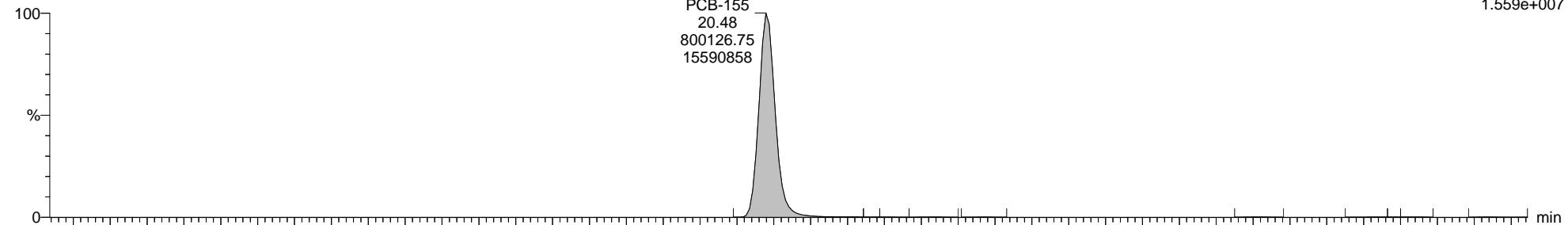
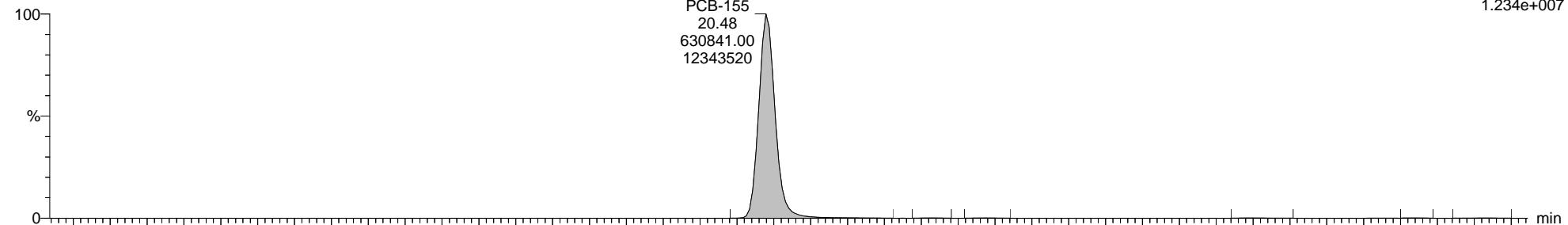
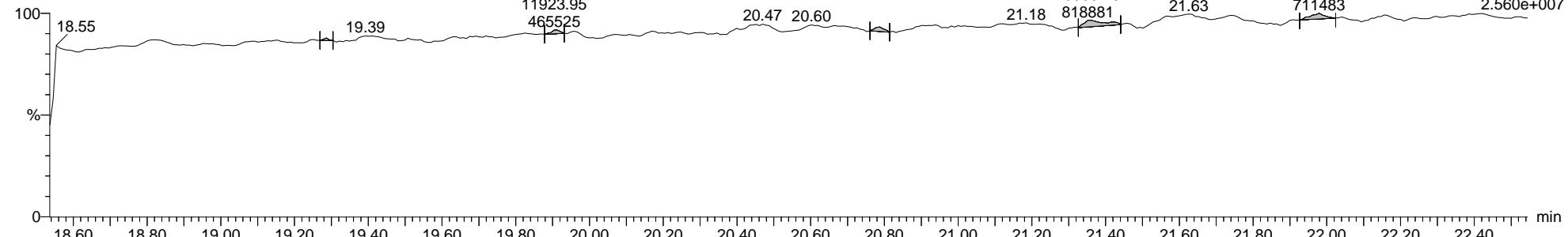
**13C-PCB-123**5-151207C18 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-5745-151207C18 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-5745-151207C18  
1668A-CS#3-015 H5-15-CCV-574

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

Name: 5-151207C18, Date: 08-Dec-2015, Time: 02:22:29, ID: H5-15-CCV-574, Description: 1668A-CS#3-015, Vial: Tray1:3

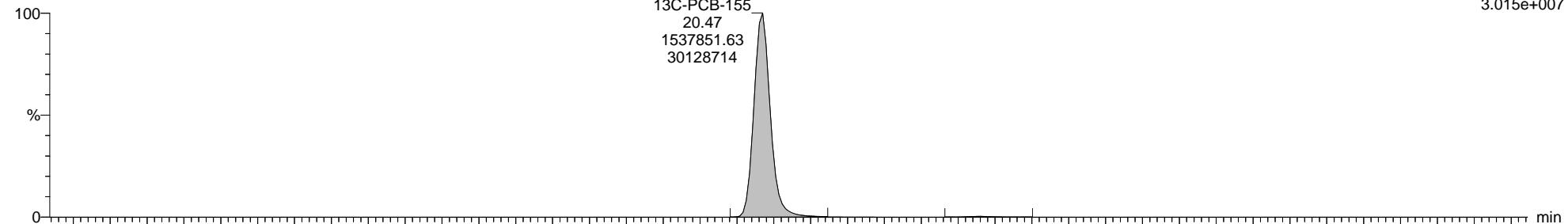
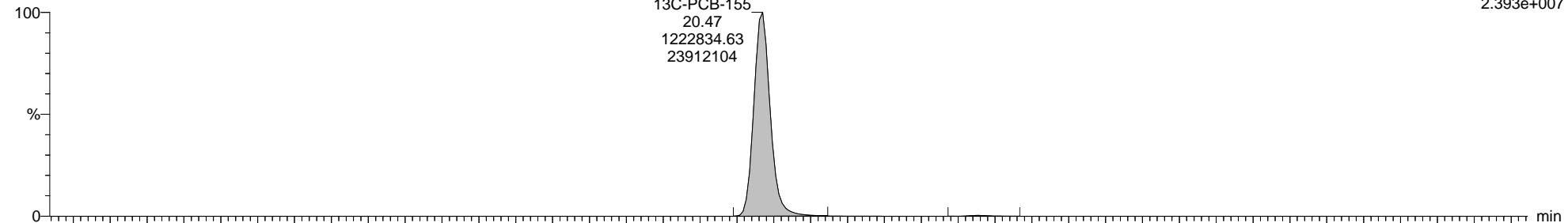
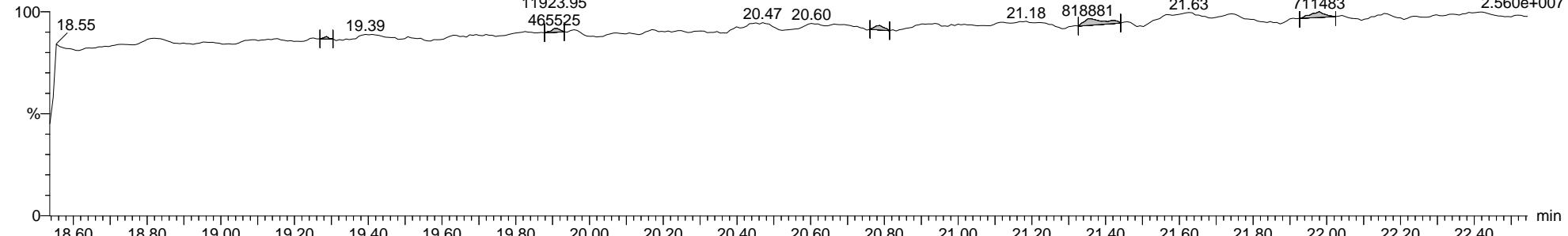
**PCB-155**5-151207C18 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-5745-151207C18 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-5745-151207C18 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-574

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

Name: 5-151207C18, Date: 08-Dec-2015, Time: 02:22:29, ID: H5-15-CCV-574, Description: 1668A-CS#3-015, Vial: Tray1:3

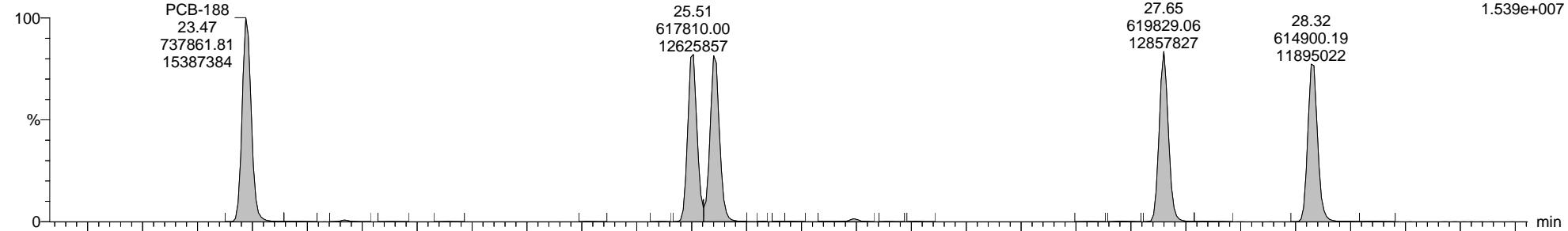
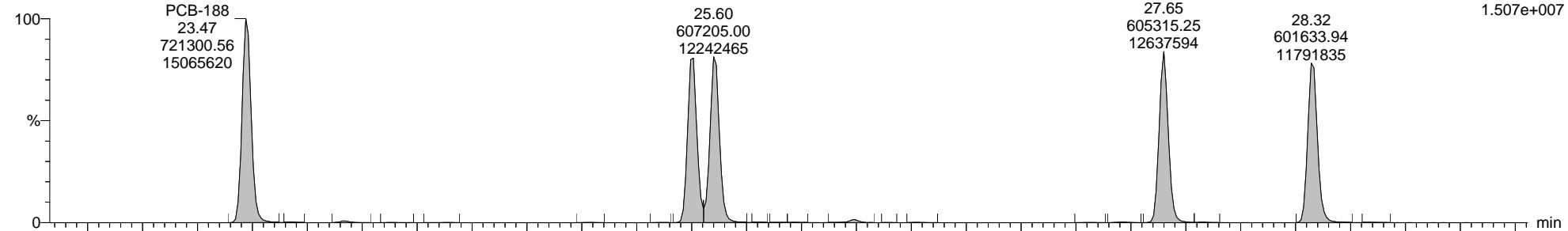
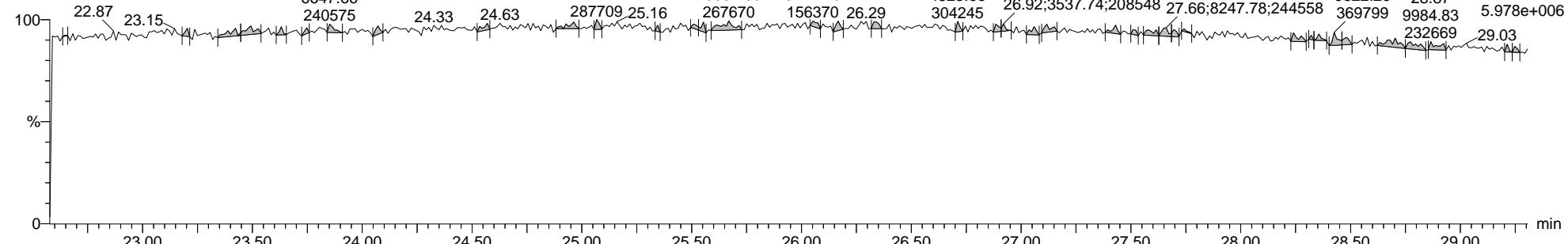
**13C-PCB-155**5-151207C18 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-5745-151207C18 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-574F4:Voltage SIR,EI+  
373.8789  
2.393e+0075-151207C18 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-574F4:Voltage SIR,EI+  
330.9792  
2.560e+007

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

Name: 5-151207C18, Date: 08-Dec-2015, Time: 02:22:29, ID: H5-15-CCV-574, Description: 1668A-CS#3-015, Vial: Tray1:3

**PCB-188**5-151207C18  
1668A-CS#3-015 H5-15-CCV-5745-151207C18  
1668A-CS#3-015 H5-15-CCV-5745-151207C18  
1668A-CS#3-015 H5-15-CCV-574

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

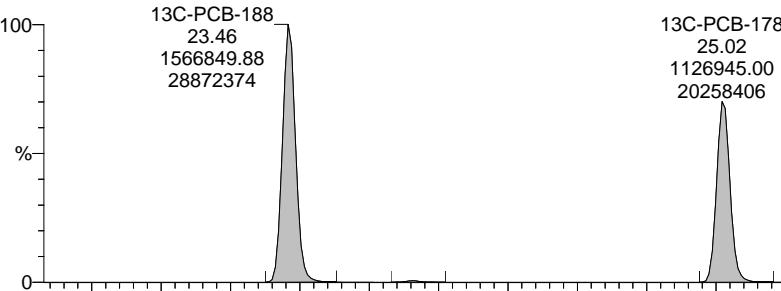
Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

Name: 5-151207C18, Date: 08-Dec-2015, Time: 02:22:29, ID: H5-15-CCV-574, Description: 1668A-CS#3-015, Vial: Tray1:3

**13C-PCB-188**

5-151207C18 Smooth(Mn,1x1)

1668A-CS#3-015 H5-15-CCV-574



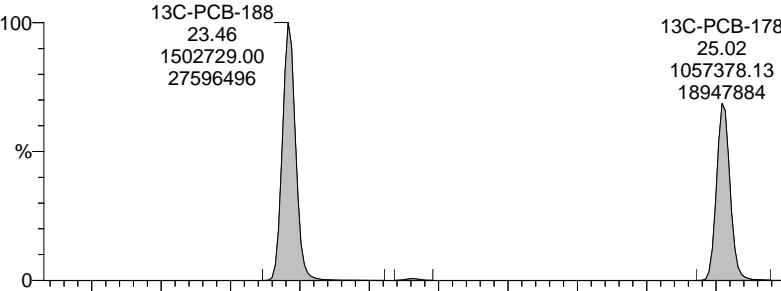
F5:Voltage SIR,EI+

405.8428

2.888e+007

5-151207C18 Smooth(Mn,1x1)

1668A-CS#3-015 H5-15-CCV-574



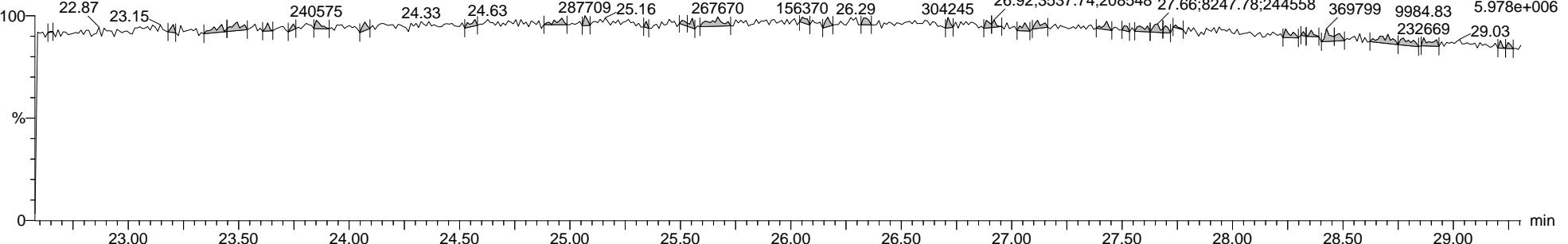
F5:Voltage SIR,EI+

407.8399

2.760e+007

5-151207C18

1668A-CS#3-015 H5-15-CCV-574



Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

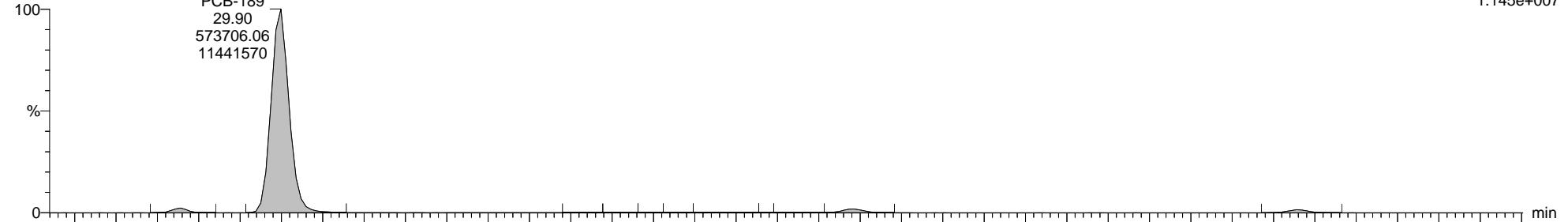
Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

Name: 5-151207C18, Date: 08-Dec-2015, Time: 02:22:29, ID: H5-15-CCV-574, Description: 1668A-CS#3-015, Vial: Tray1:3

**PCB-189**

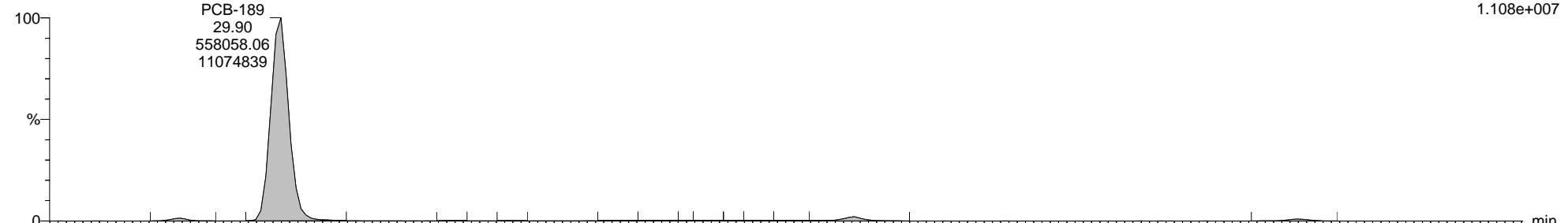
5-151207C18

1668A-CS#3-015 H5-15-CCV-574

PCB-189  
29.90  
573706.06  
11441570F6:Voltage SIR, EI+  
393.8025  
1.145e+007

5-151207C18

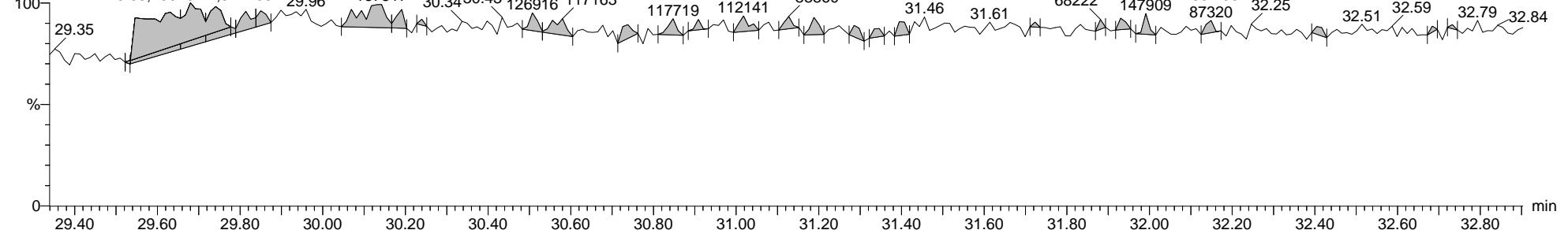
1668A-CS#3-015 H5-15-CCV-574

PCB-189  
29.90  
558058.06  
11074839F6:Voltage SIR, EI+  
395.7995  
1.108e+007

5-151207C18

1668A-CS#3-015 H5-15-CCV-574

29.68;15016.42;312135



Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

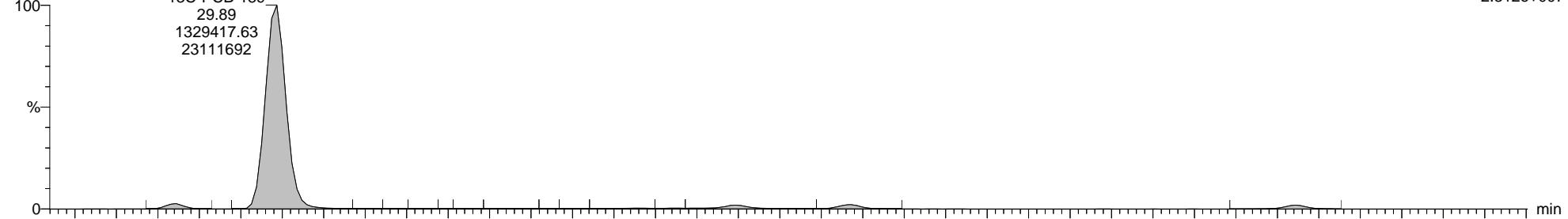
Name: 5-151207C18, Date: 08-Dec-2015, Time: 02:22:29, ID: H5-15-CCV-574, Description: 1668A-CS#3-015, Vial: Tray1:3

**13C-PCB-189**

5-151207C18 Smooth(Mn,1x1)

1668A-CS#3-015 H5-15-CCV-574

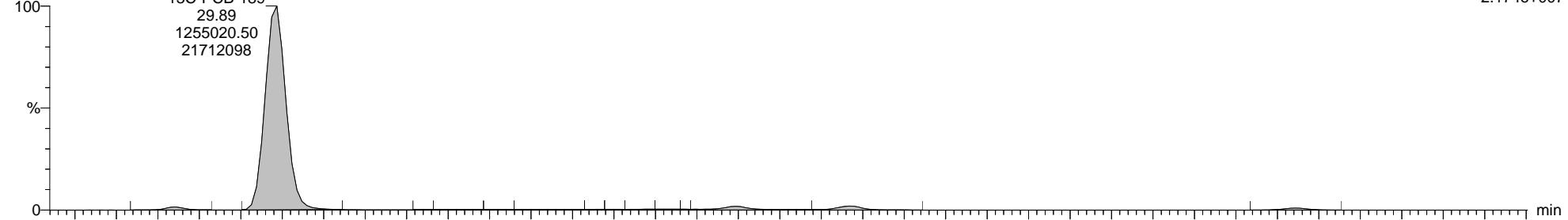
13C-PCB-189



5-151207C18 Smooth(Mn,1x1)

1668A-CS#3-015 H5-15-CCV-574

13C-PCB-189

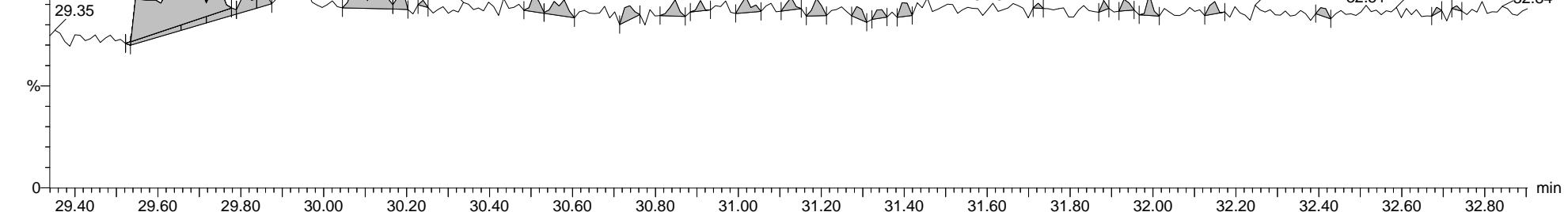


5-151207C18

1668A-CS#3-015 H5-15-CCV-574

29.68;15016.42;312135

29.96

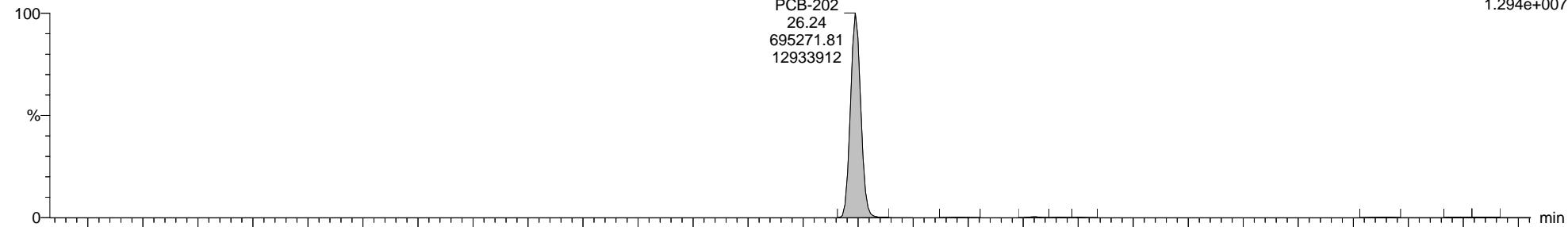
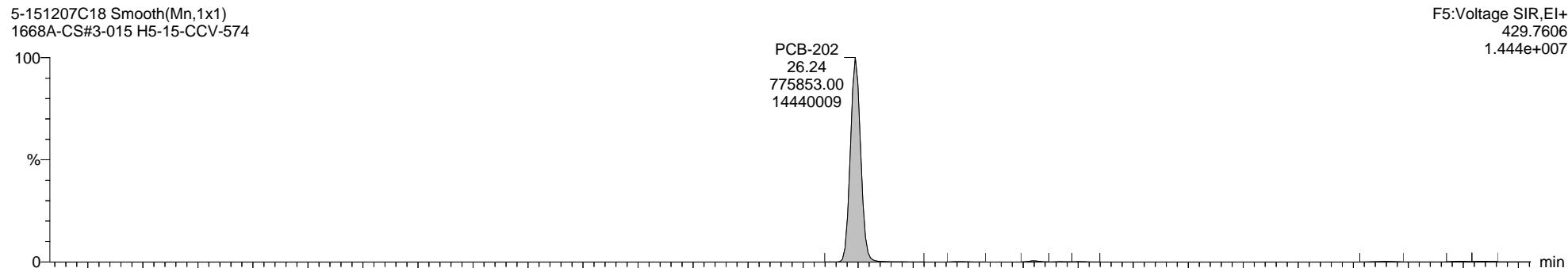
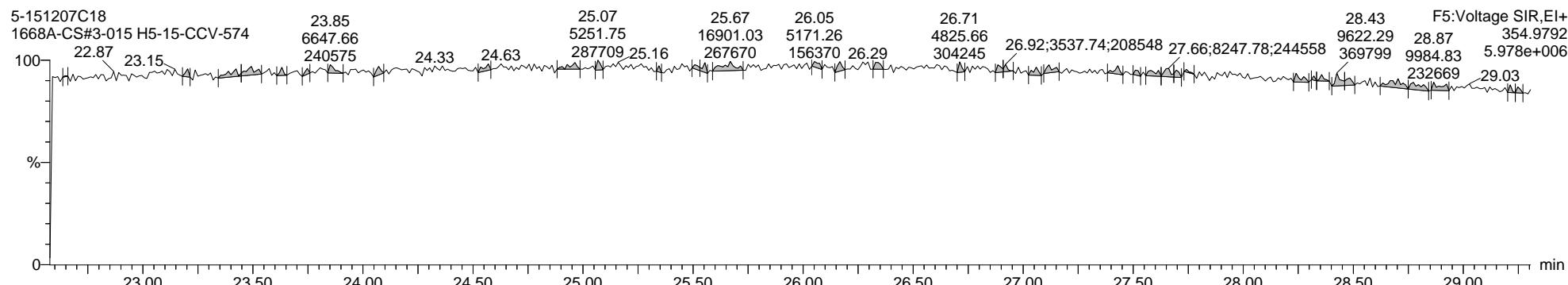


Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

Name: 5-151207C18, Date: 08-Dec-2015, Time: 02:22:29, ID: H5-15-CCV-574, Description: 1668A-CS#3-015, Vial: Tray1:3

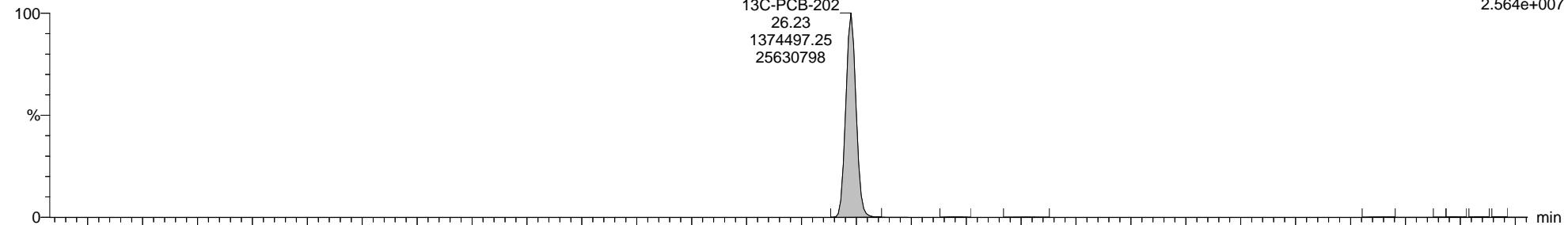
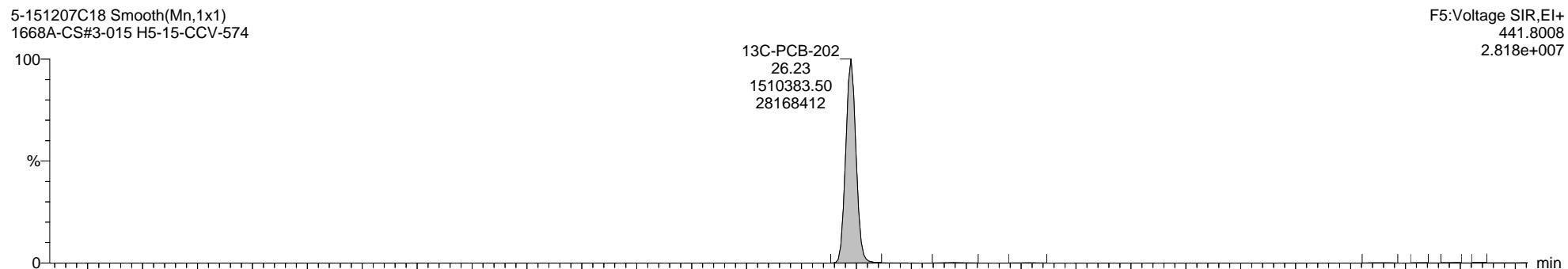
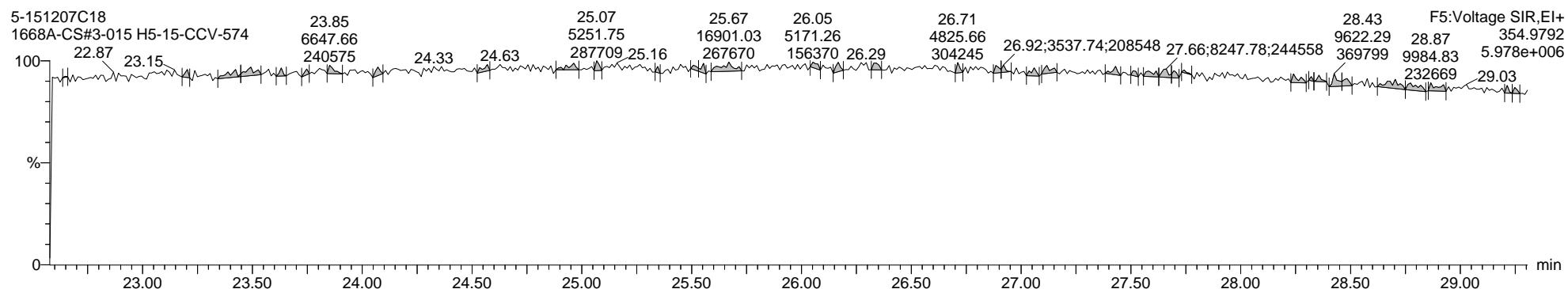
**PCB-202**5-151207C18 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-5745-151207C18 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-5745-151207C18  
1668A-CS#3-015 H5-15-CCV-574

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

Name: 5-151207C18, Date: 08-Dec-2015, Time: 02:22:29, ID: H5-15-CCV-574, Description: 1668A-CS#3-015, Vial: Tray1:3

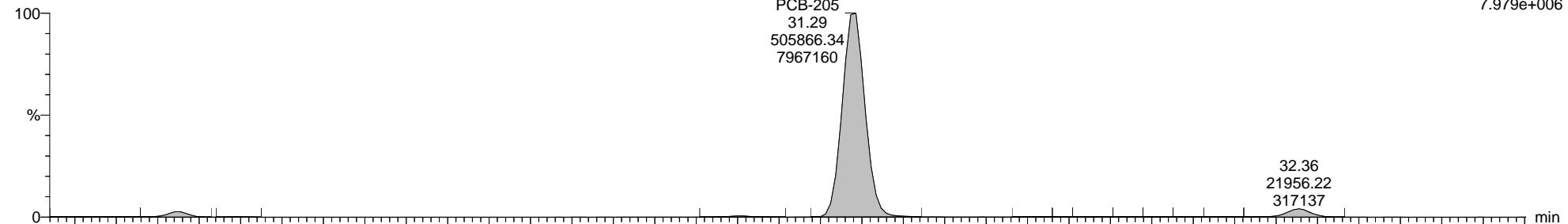
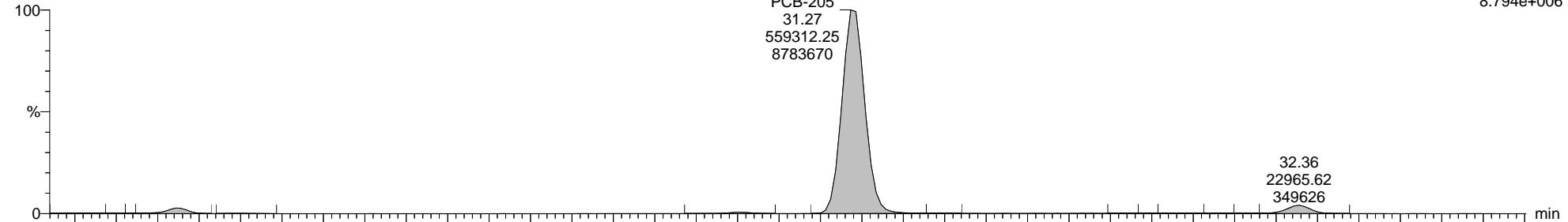
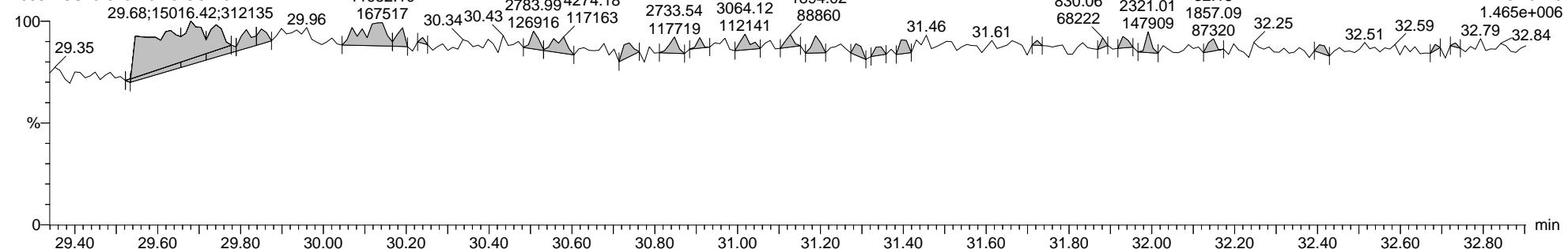
**13C-PCB-202**5-151207C18 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-5745-151207C18 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-5745-151207C18  
1668A-CS#3-015 H5-15-CCV-574

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

Name: 5-151207C18, Date: 08-Dec-2015, Time: 02:22:29, ID: H5-15-CCV-574, Description: 1668A-CS#3-015, Vial: Tray1:3

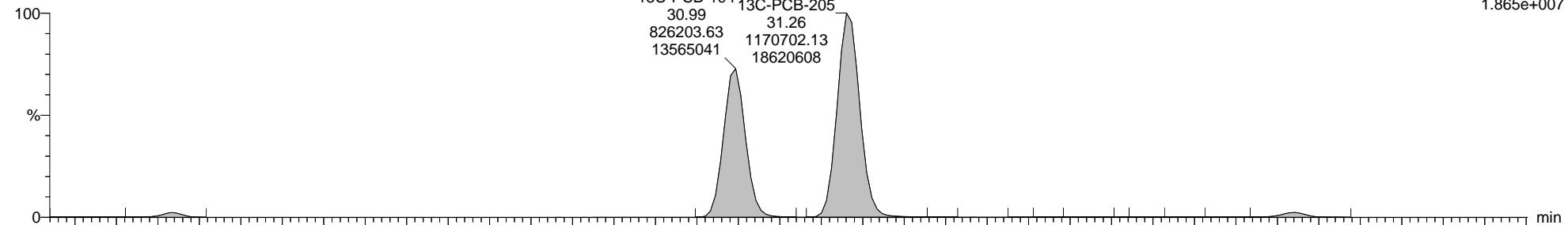
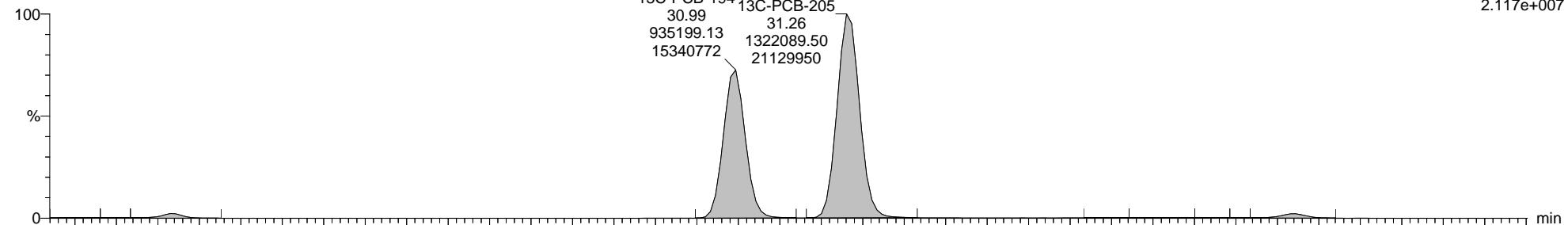
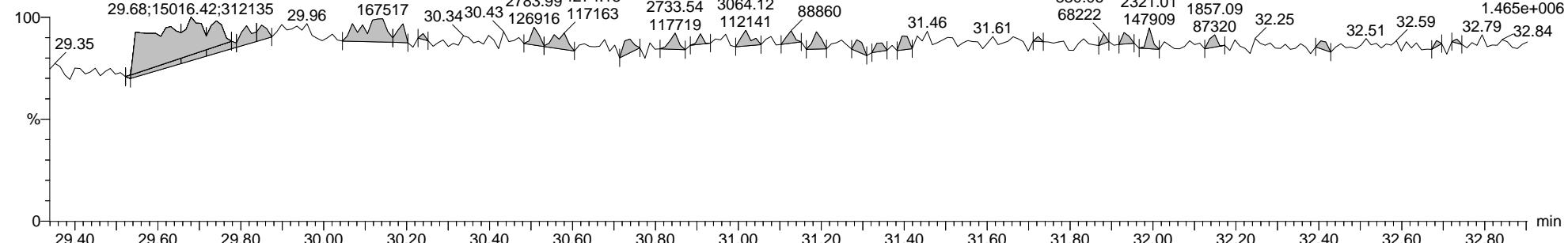
**PCB-205**5-151207C18 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-574F6:Voltage SIR,EI+  
427.7635  
7.979e+0065-151207C18 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-574F6:Voltage SIR,EI+  
429.7606  
8.794e+0065-151207C18  
1668A-CS#3-015 H5-15-CCV-574F6:Voltage SIR,EI+  
454.9728  
1.465e+006

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

Name: 5-151207C18, Date: 08-Dec-2015, Time: 02:22:29, ID: H5-15-CCV-574, Description: 1668A-CS#3-015, Vial: Tray1:3

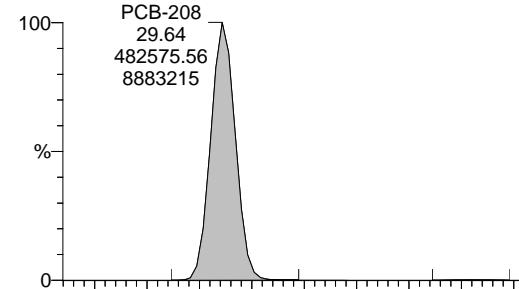
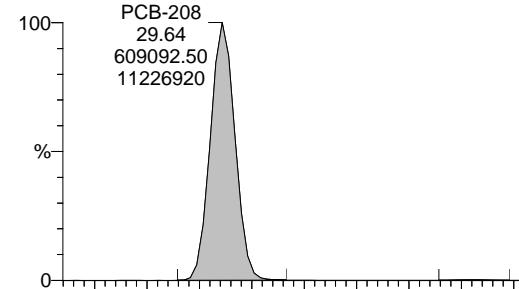
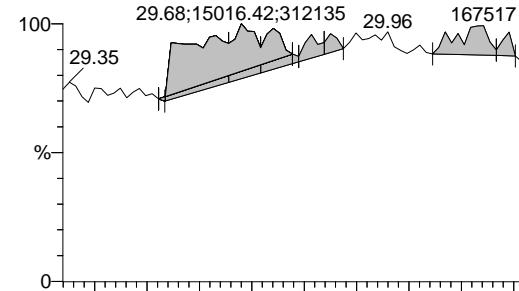
**13C-PCB-205**5-151207C18 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-5745-151207C18 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-5745-151207C18  
1668A-CS#3-015 H5-15-CCV-574

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

Name: 5-151207C18, Date: 08-Dec-2015, Time: 02:22:29, ID: H5-15-CCV-574, Description: 1668A-CS#3-015, Vial: Tray1:3

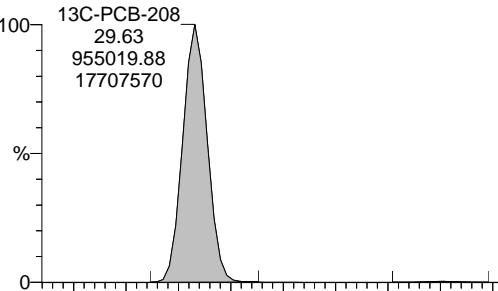
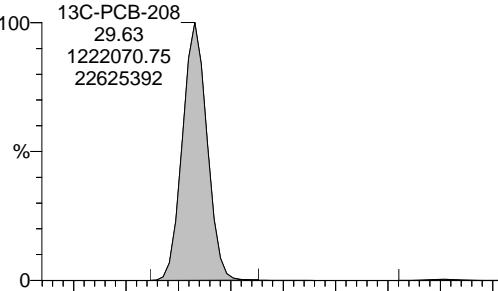
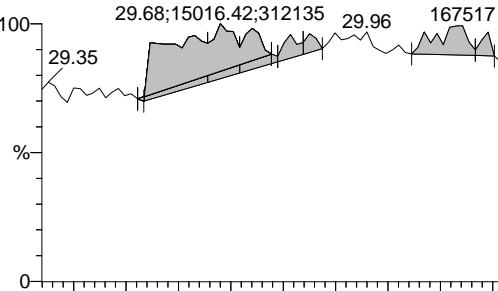
**PCB-208**5-151207C18 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-574F6:Voltage SIR, EI+  
461.7246  
8.887e+006PCB-206  
32.36  
327456.31  
4897048F6:Voltage SIR, EI+  
463.7216  
1.124e+0075-151207C18 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-574PCB-206  
32.34  
414120.31  
60929105-151207C18  
1668A-CS#3-015 H5-15-CCV-574F6:Voltage SIR, EI+  
454.9728  
1.465e+006

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

Name: 5-151207C18, Date: 08-Dec-2015, Time: 02:22:29, ID: H5-15-CCV-574, Description: 1668A-CS#3-015, Vial: Tray1:3

**13C-PCB-208**5-151207C18 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-574F6:Voltage SIR, EI+  
473.7648  
1.772e+00713C-PCB-206  
32.33  
683810.81  
103022385-151207C18 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-574F6:Voltage SIR, EI+  
475.7619  
2.264e+00713C-PCB-206  
32.33  
874468.69  
130728085-151207C18  
1668A-CS#3-015 H5-15-CCV-574F6:Voltage SIR, EI+  
454.9728  
1.465e+006

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

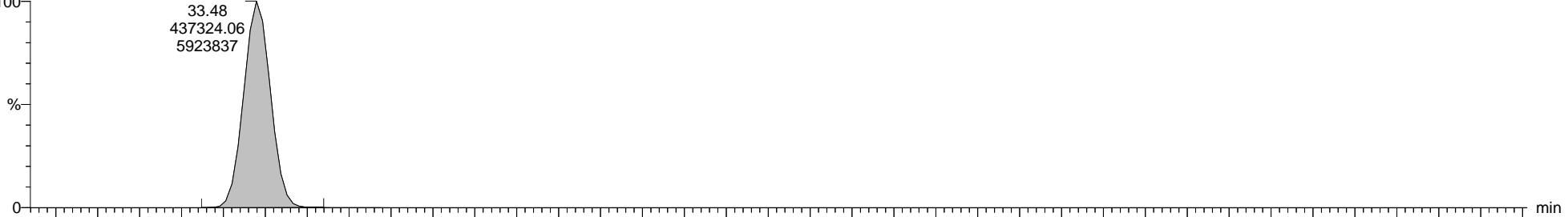
Name: 5-151207C18, Date: 08-Dec-2015, Time: 02:22:29, ID: H5-15-CCV-574, Description: 1668A-CS#3-015, Vial: Tray1:3

**PCB-209**

5-151207C18 Smooth(Mn,1x1)

1668A-CS#3-015 H5-15-CCV-574

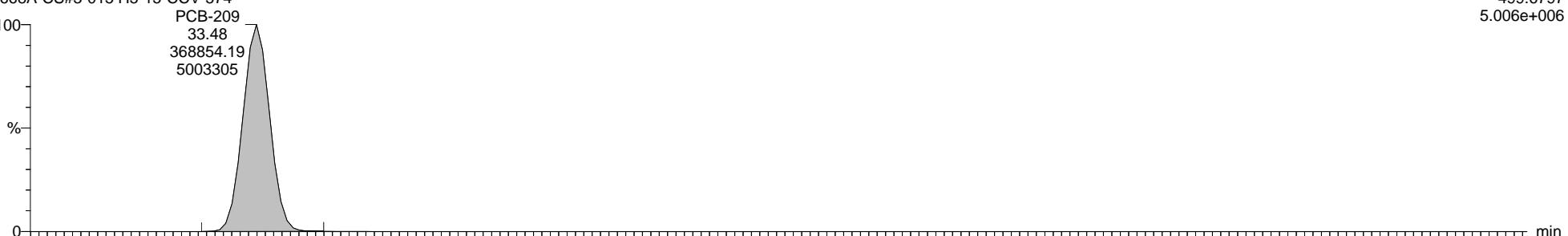
PCB-209



5-151207C18 Smooth(Mn,1x1)

1668A-CS#3-015 H5-15-CCV-574

PCB-209



5-151207C18 Smooth(Mn,1x1)

1668A-CS#3-015 H5-15-CCV-574

33.10

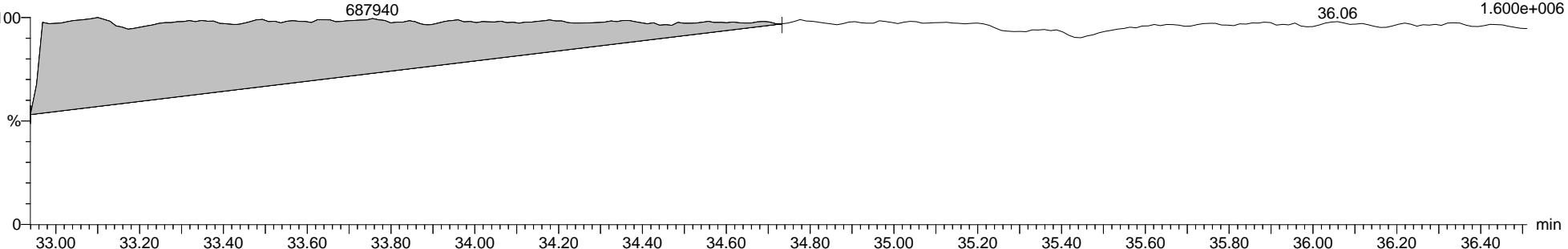
639808.50

687940

F7:Voltage SIR,EI+

516.9697

1.600e+006



Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

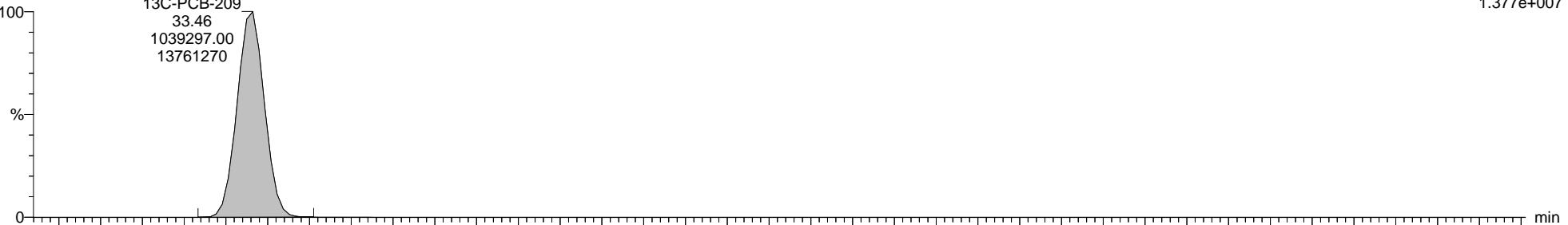
Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

Name: 5-151207C18, Date: 08-Dec-2015, Time: 02:22:29, ID: H5-15-CCV-574, Description: 1668A-CS#3-015, Vial: Tray1:3

**13C-PCB-209**

5-151207C18 Smooth(Mn,1x1)

1668A-CS#3-015 H5-15-CCV-574

13C-PCB-209  
33.46  
1039297.00  
13761270F7:Voltage SIR, EI+  
509.7229  
1.377e+007

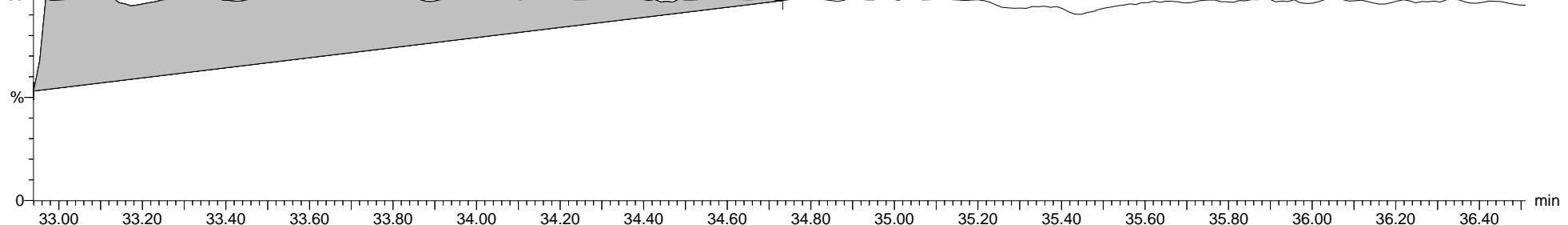
5-151207C18 Smooth(Mn,1x1)

1668A-CS#3-015 H5-15-CCV-574

13C-PCB-209  
33.46  
878861.63  
11587094F7:Voltage SIR, EI+  
511.7199  
1.159e+007

5-151207C18 Smooth(Mn,1x1)

1668A-CS#3-015 H5-15-CCV-574

33.10  
639808.50  
687940F7:Voltage SIR, EI+  
516.9697  
1.600e+006

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

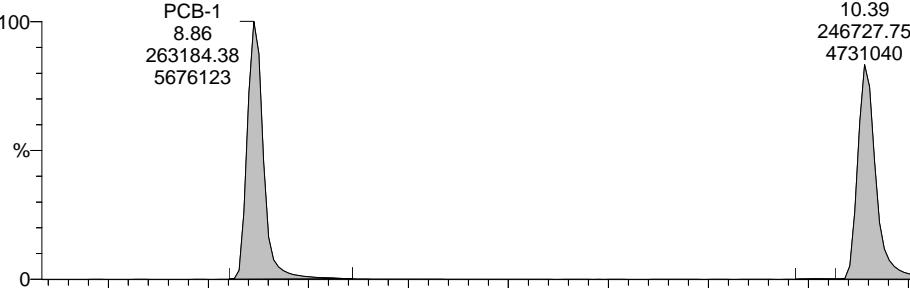
Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

Name: 5-151207C19, Date: 08-Dec-2015, Time: 03:02:08, ID: WG2225462-2, Description: LCS, Vial: Tray1:15

**PCB-1**

5-151207C19 Smooth(Mn,1x1)

LCS WG2225462-2



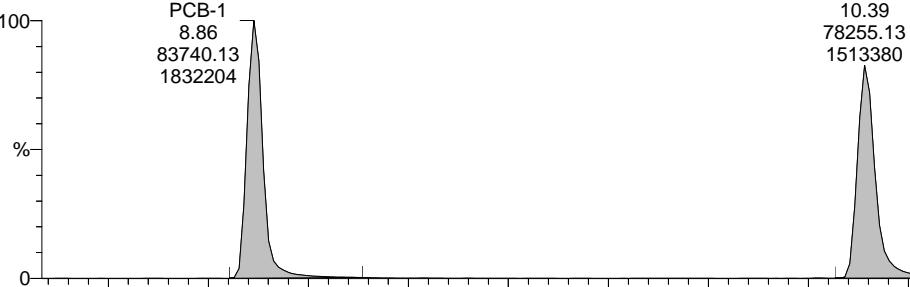
F1:Voltage SIR, EI+

188.0393

5.681e+006

5-151207C19 Smooth(Mn,1x1)

LCS WG2225462-2



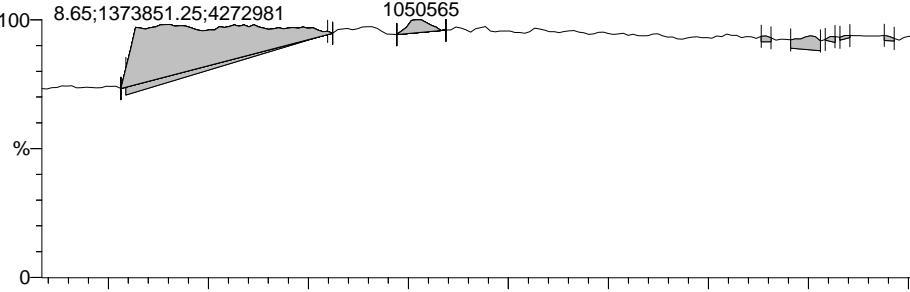
F1:Voltage SIR, EI+

190.0363

1.835e+006

5-151207C19 Smooth(Mn,1x1)

LCS WG2225462-2



F1:Voltage SIR, EI+

218.9856

2.156e+007

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

Name: 5-151207C19, Date: 08-Dec-2015, Time: 03:02:08, ID: WG2225462-2, Description: LCS, Vial: Tray1:15

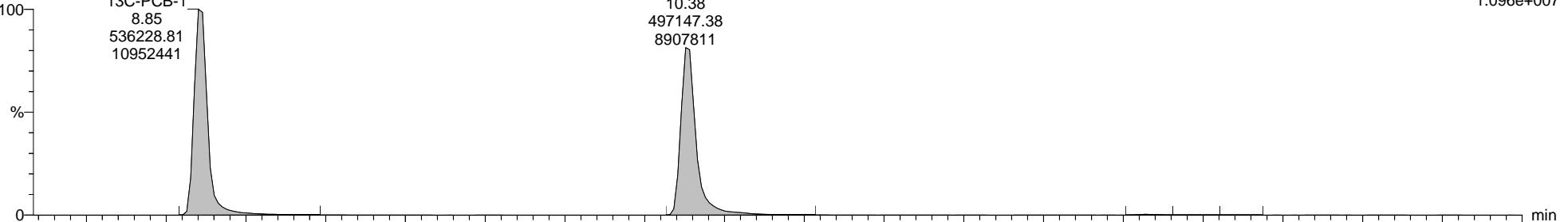
**13C-PCB-1**

5-151207C19 Smooth(Mn,1x1)

LCS WG2225462-2

13C-PCB-1  
8.85  
536228.81  
10952441

13C-PCB-3

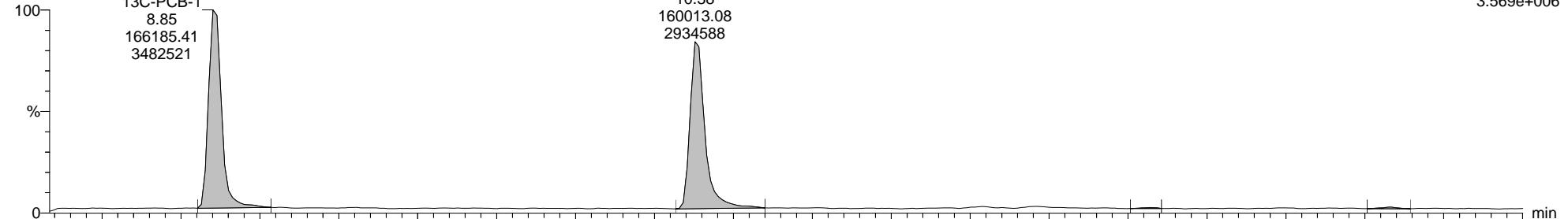
10.38  
497147.38  
8907811F1:Voltage SIR,EI+  
200.0795  
1.096e+007

5-151207C19 Smooth(Mn,1x1)

LCS WG2225462-2

13C-PCB-1  
8.85  
166185.41  
3482521

13C-PCB-3

10.38  
160013.08  
2934588F1:Voltage SIR,EI+  
202.0766  
3.569e+006

5-151207C19 Smooth(Mn,1x1)

LCS WG2225462-2

8.65;1373851.25;4272981

9.28

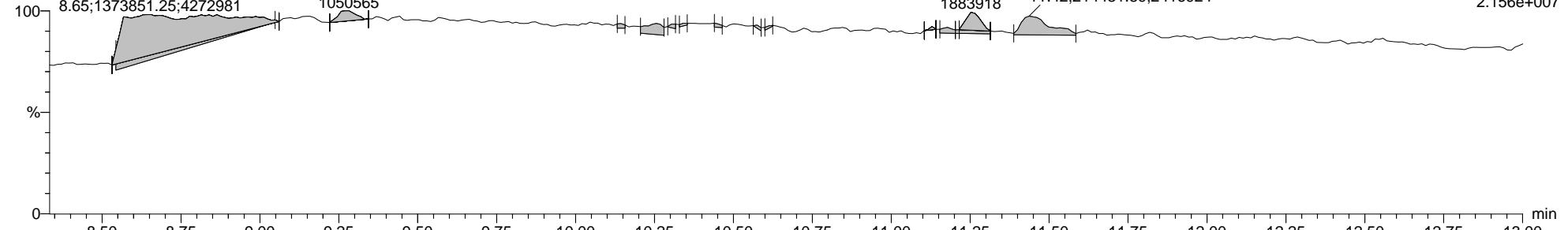
68846.35

1050565

11.25

98838.24

1883918

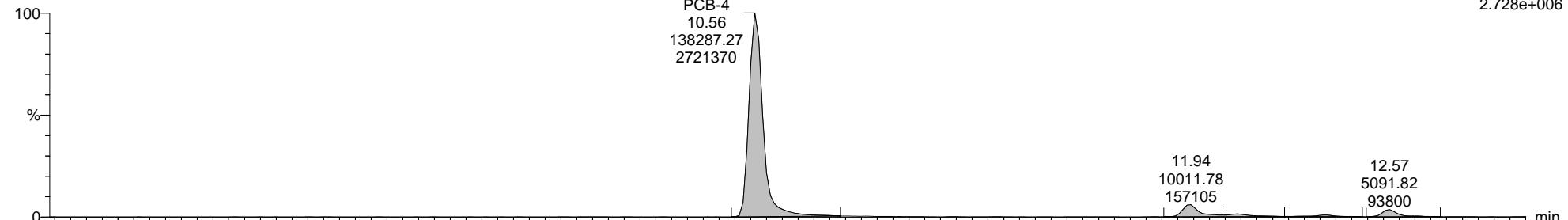
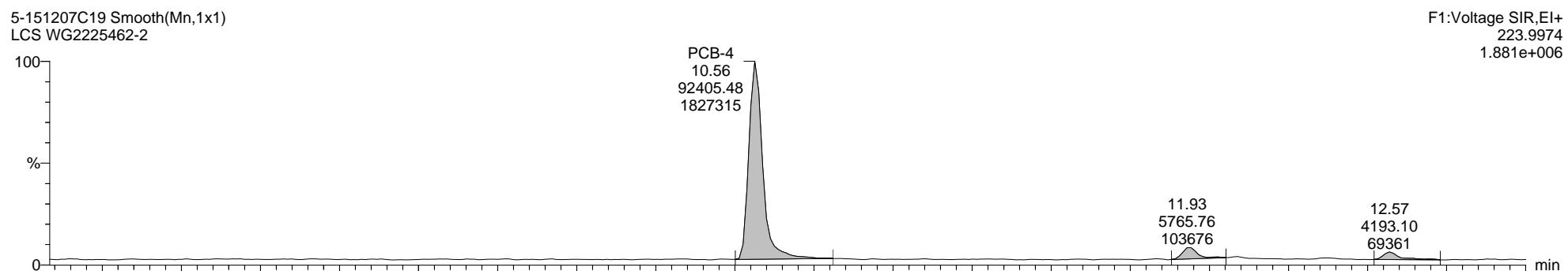
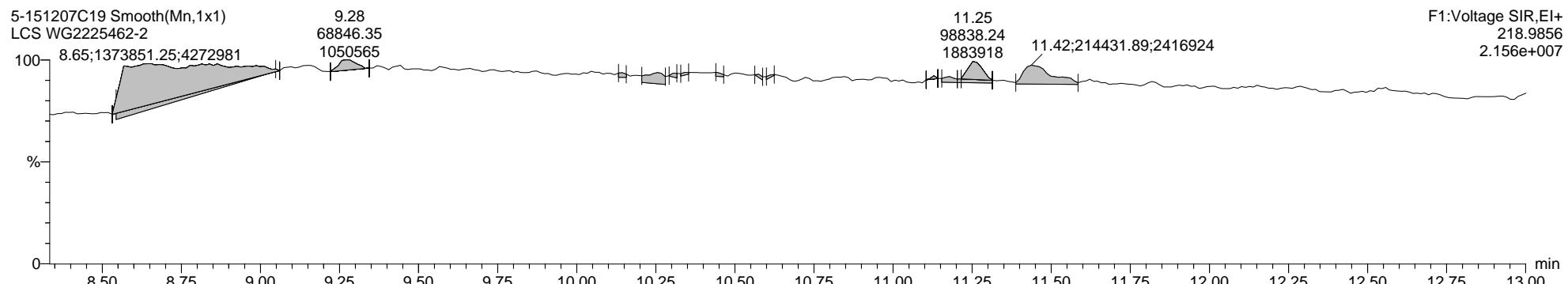
F1:Voltage SIR,EI+  
218.9856  
2.156e+007

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

Name: 5-151207C19, Date: 08-Dec-2015, Time: 03:02:08, ID: WG2225462-2, Description: LCS, Vial: Tray1:15

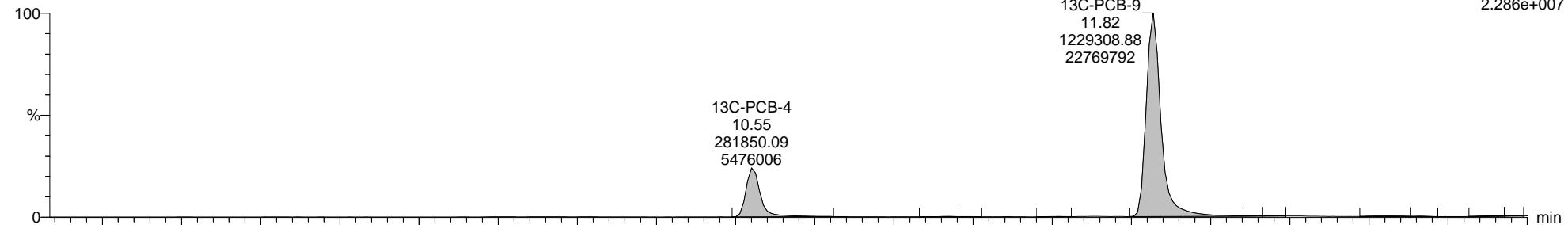
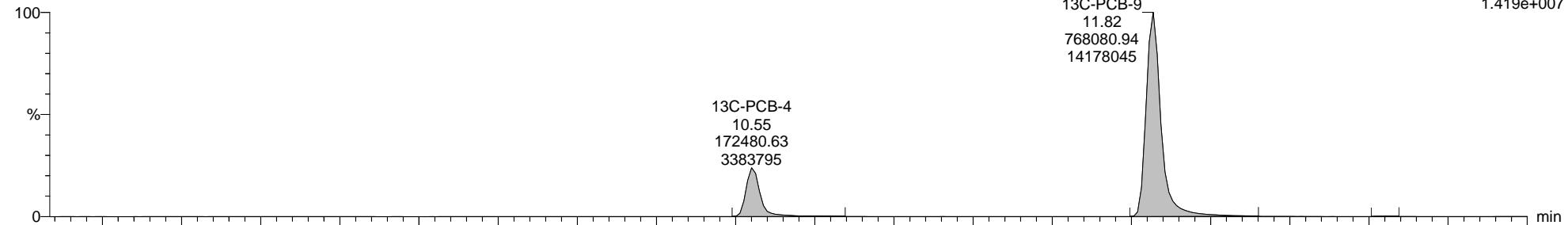
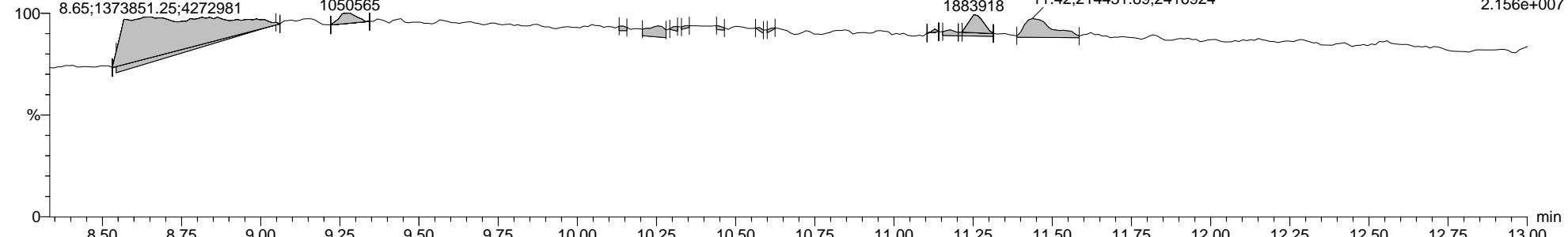
**PCB-4**5-151207C19 Smooth(Mn,1x1)  
LCS WG2225462-25-151207C19 Smooth(Mn,1x1)  
LCS WG2225462-25-151207C19 Smooth(Mn,1x1)  
LCS WG2225462-2

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

Name: 5-151207C19, Date: 08-Dec-2015, Time: 03:02:08, ID: WG2225462-2, Description: LCS, Vial: Tray1:15

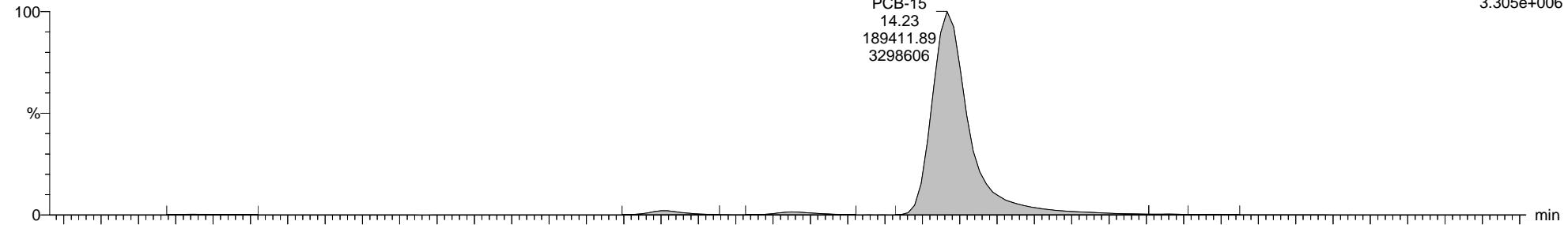
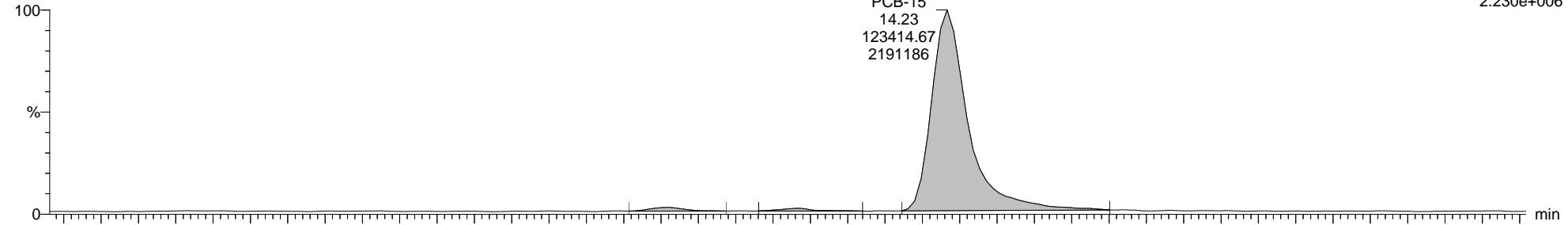
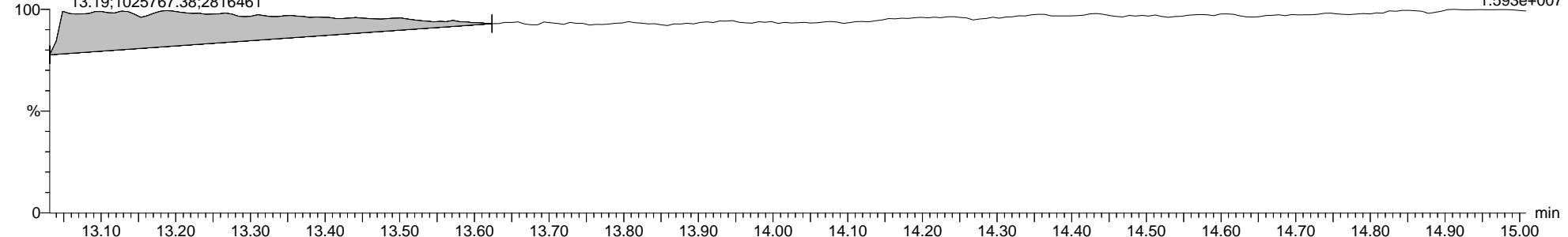
**13C-PCB-4**5-151207C19 Smooth(Mn,1x1)  
LCS WG2225462-25-151207C19 Smooth(Mn,1x1)  
LCS WG2225462-25-151207C19 Smooth(Mn,1x1)  
LCS WG2225462-2

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

Name: 5-151207C19, Date: 08-Dec-2015, Time: 03:02:08, ID: WG2225462-2, Description: LCS, Vial: Tray1:15

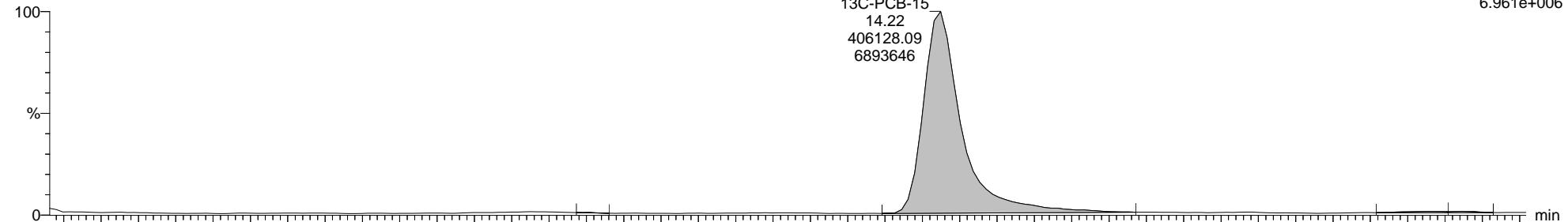
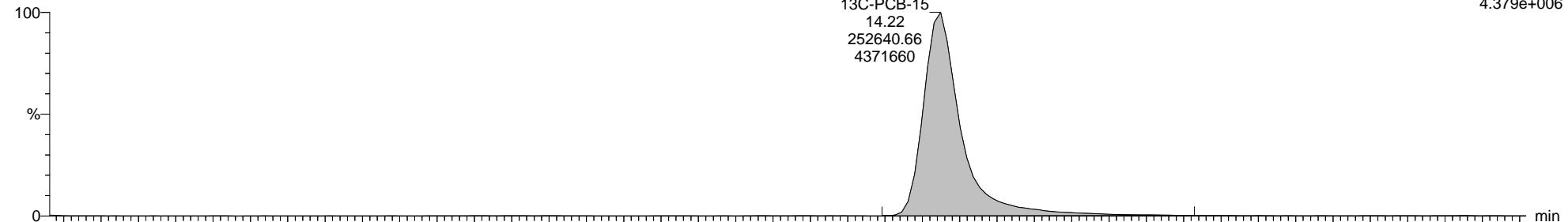
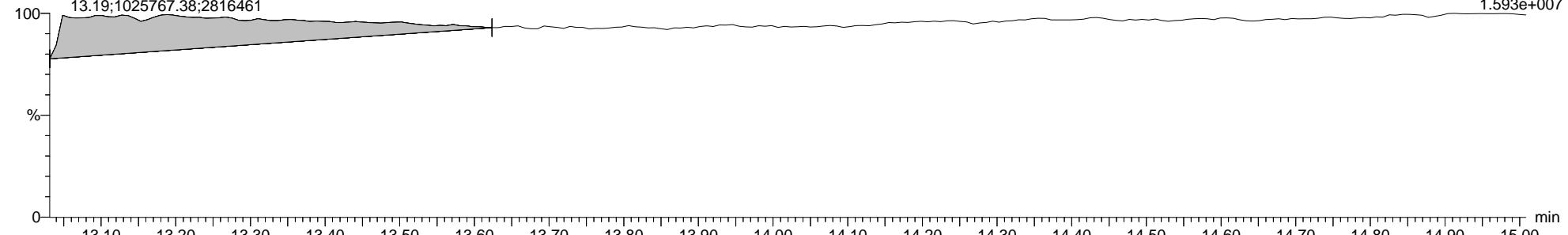
**PCB-15**5-151207C19 Smooth(Mn,1x1)  
LCS WG2225462-2F2:Voltage SIR,EI+  
222.0003  
3.305e+0065-151207C19 Smooth(Mn,1x1)  
LCS WG2225462-2F2:Voltage SIR,EI+  
223.9974  
2.230e+0065-151207C19 Smooth(Mn,1x1)  
LCS WG2225462-2F2:Voltage SIR,EI+  
242.9856  
1.593e+007

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

Name: 5-151207C19, Date: 08-Dec-2015, Time: 03:02:08, ID: WG2225462-2, Description: LCS, Vial: Tray1:15

**13C-PCB-15**5-151207C19 Smooth(Mn,1x1)  
LCS WG2225462-25-151207C19 Smooth(Mn,1x1)  
LCS WG2225462-2F2:Voltage SIR,EI+  
236.0376  
4.379e+0065-151207C19 Smooth(Mn,1x1)  
LCS WG2225462-2F2:Voltage SIR,EI+  
242.9856  
1.593e+007

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

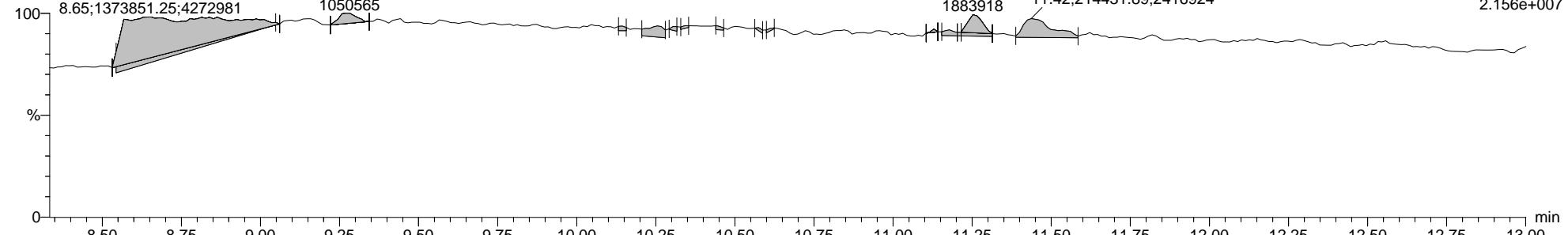
Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

Name: 5-151207C19, Date: 08-Dec-2015, Time: 03:02:08, ID: WG2225462-2, Description: LCS, Vial: Tray1:15

**PCB-19**5-151207C19  
LCS WG2225462-25-151207C19  
LCS WG2225462-2

5-151207C19 Smooth(Mn,1x1)

LCS WG2225462-2

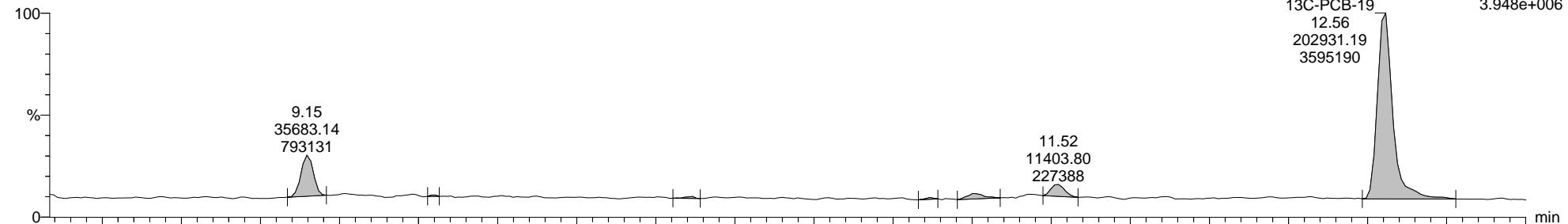
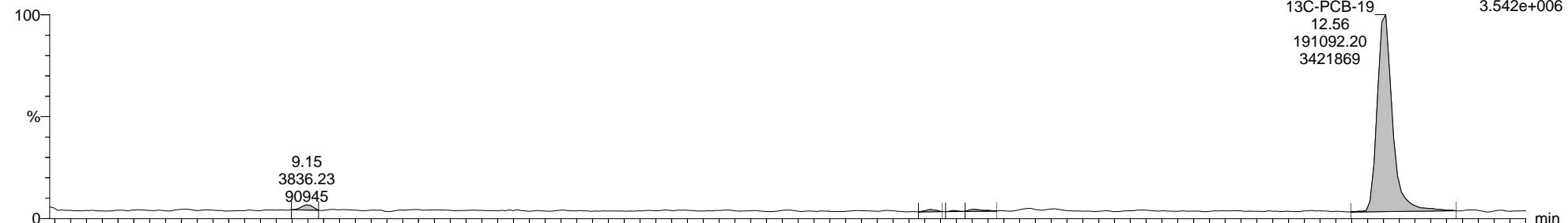
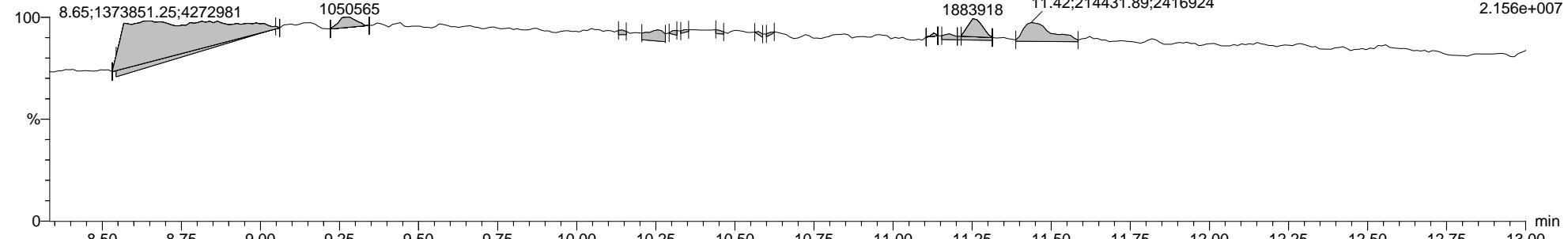


Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

Name: 5-151207C19, Date: 08-Dec-2015, Time: 03:02:08, ID: WG2225462-2, Description: LCS, Vial: Tray1:15

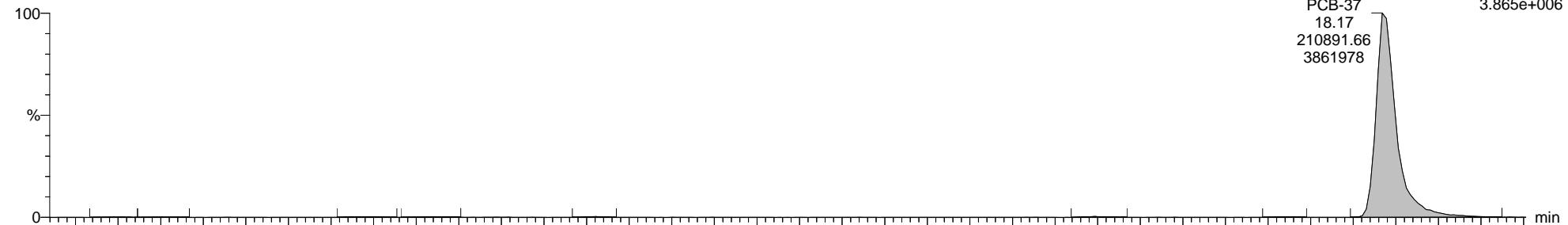
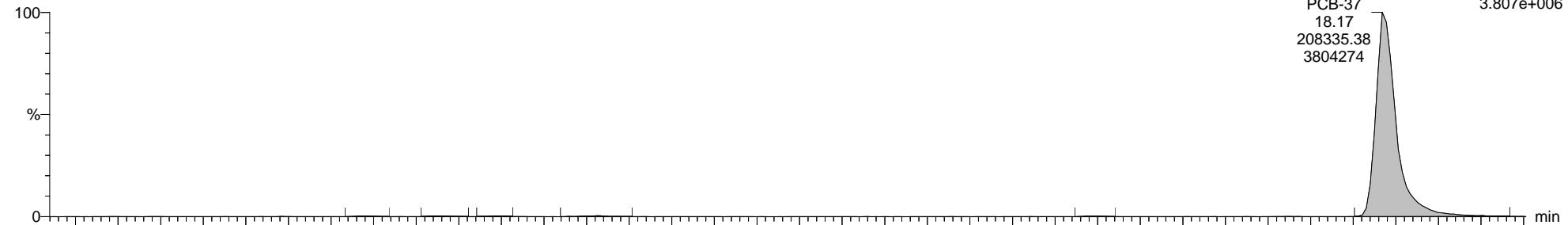
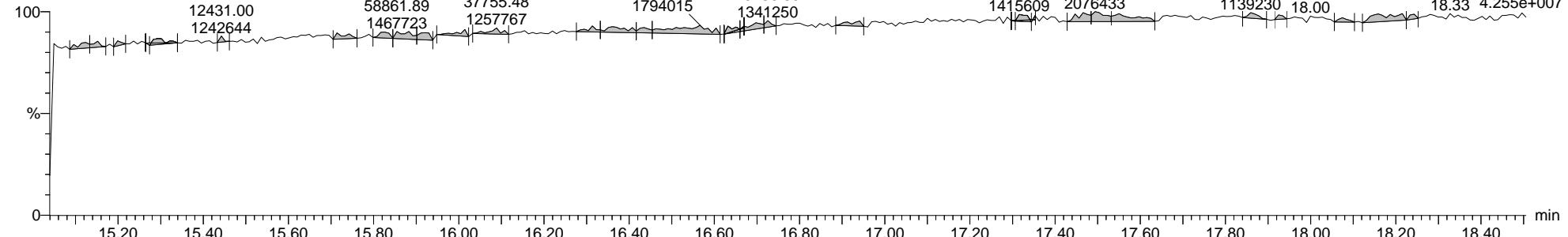
**13C-PCB-19**5-151207C19 Smooth(Mn,1x1)  
LCS WG2225462-25-151207C19 Smooth(Mn,1x1)  
LCS WG2225462-25-151207C19 Smooth(Mn,1x1)  
LCS WG2225462-2

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

Name: 5-151207C19, Date: 08-Dec-2015, Time: 03:02:08, ID: WG2225462-2, Description: LCS, Vial: Tray1:15

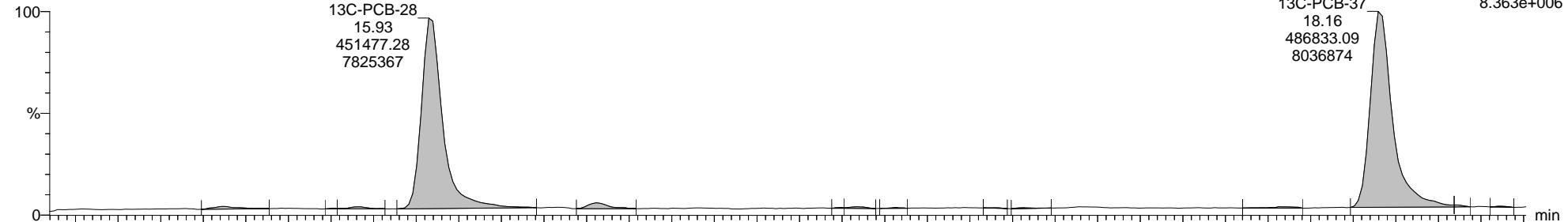
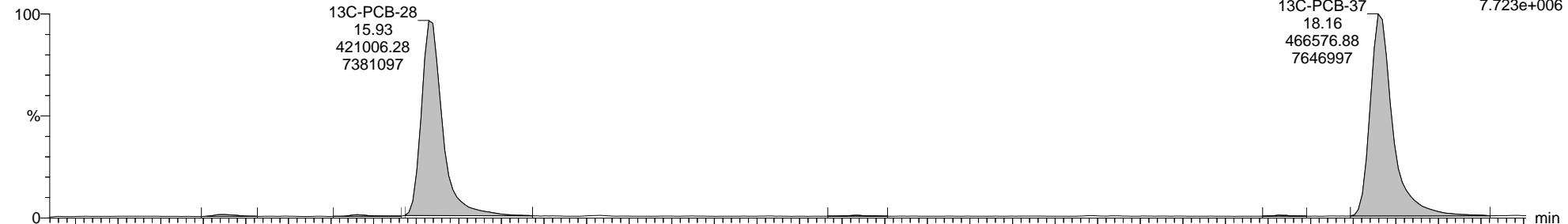
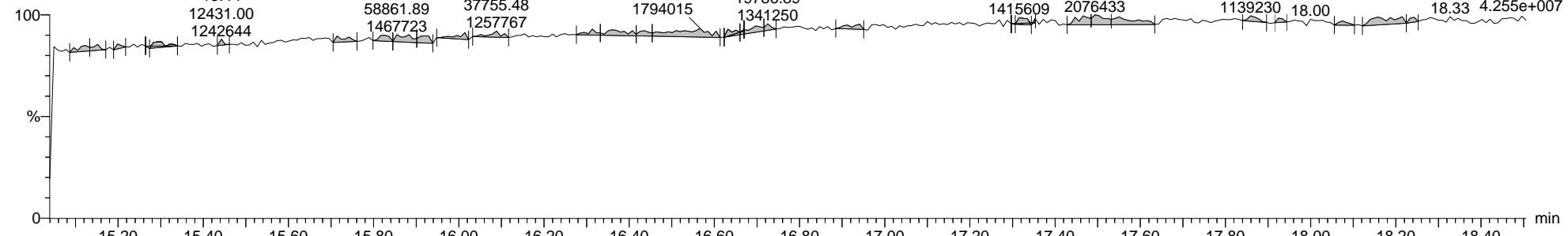
**PCB-37**5-151207C19  
LCS WG2225462-25-151207C19  
LCS WG2225462-25-151207C19  
LCS WG2225462-2

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

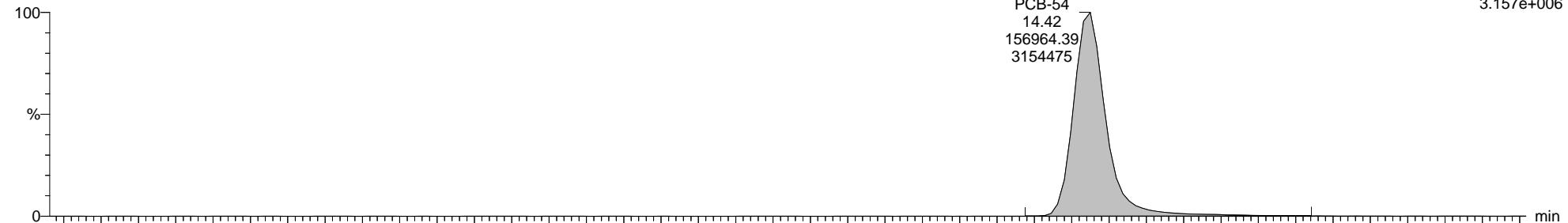
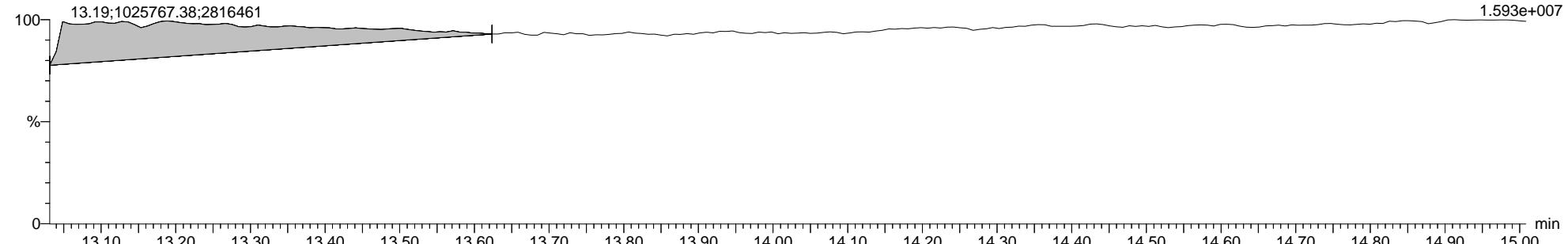
Name: 5-151207C19, Date: 08-Dec-2015, Time: 03:02:08, ID: WG2225462-2, Description: LCS, Vial: Tray1:15

**13C-PCB-37**5-151207C19 Smooth(Mn,1x1)  
LCS WG2225462-25-151207C19 Smooth(Mn,1x1)  
LCS WG2225462-25-151207C19  
LCS WG2225462-2

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

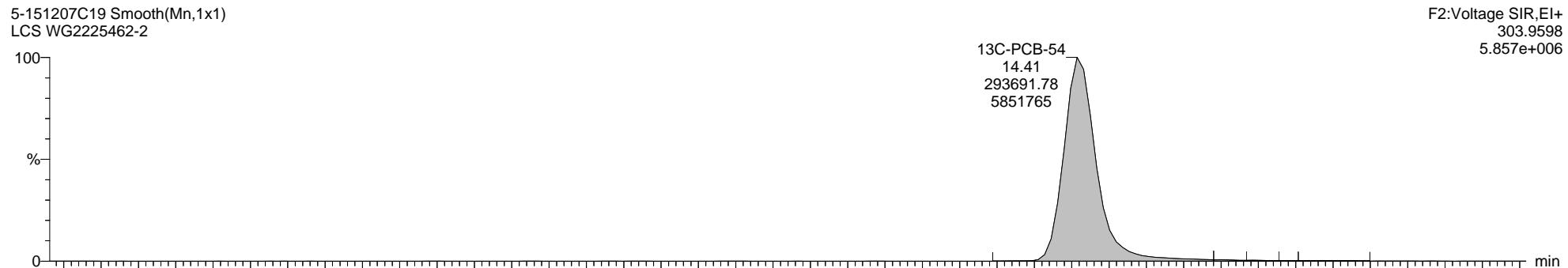
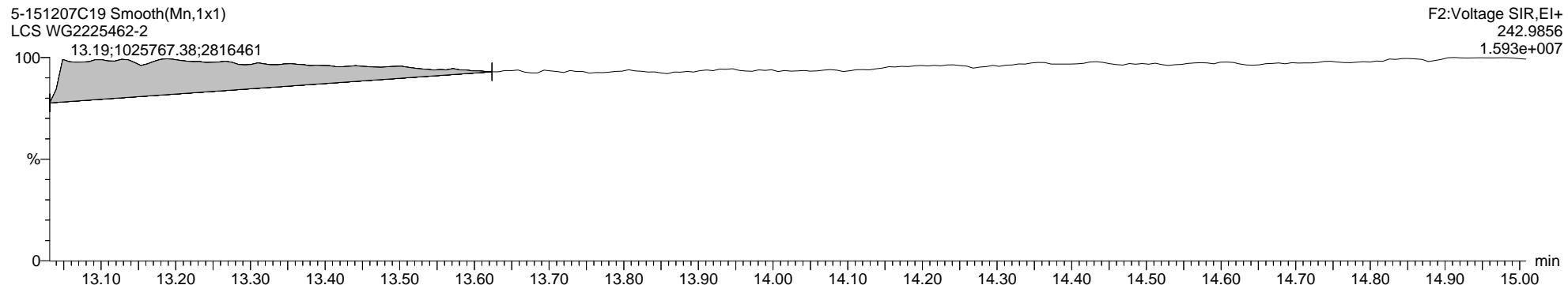
Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

**Name: 5-151207C19, Date: 08-Dec-2015, Time: 03:02:08, ID: WG2225462-2, Description: LCS, Vial: Tray1:15****PCB-54**5-151207C19 Smooth(Mn,1x1)  
LCS WG2225462-25-151207C19 Smooth(Mn,1x1)  
LCS WG2225462-25-151207C19 Smooth(Mn,1x1)  
LCS WG2225462-2

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

**Name: 5-151207C19, Date: 08-Dec-2015, Time: 03:02:08, ID: WG2225462-2, Description: LCS, Vial: Tray1:15****13C-PCB-54**5-151207C19 Smooth(Mn,1x1)  
LCS WG2225462-25-151207C19 Smooth(Mn,1x1)  
LCS WG2225462-25-151207C19 Smooth(Mn,1x1)  
LCS WG2225462-2

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

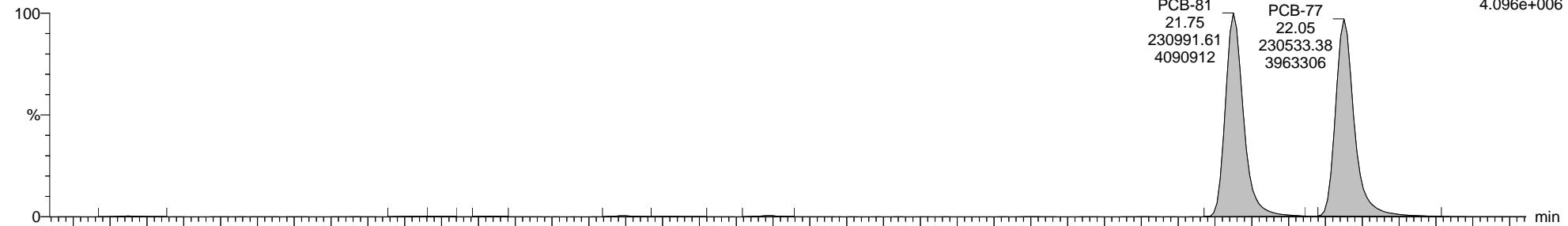
Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

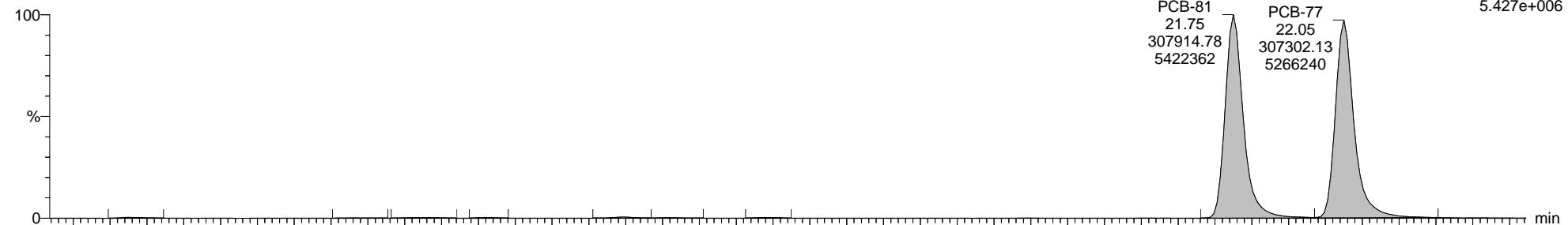
Name: 5-151207C19, Date: 08-Dec-2015, Time: 03:02:08, ID: WG2225462-2, Description: LCS, Vial: Tray1:15

### PCB-81

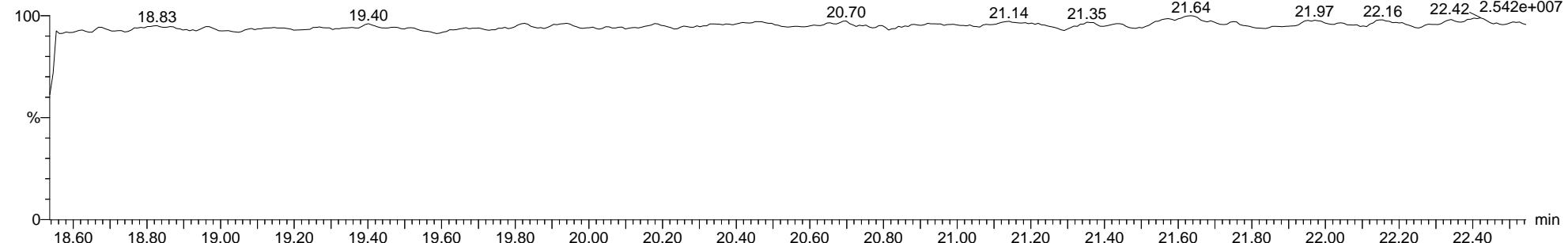
5-151207C19 Smooth(Mn,1x1)  
LCS WG2225462-2



5-151207C19 Smooth(Mn,1x1)  
LCS WG2225462-2



5-151207C19 Smooth(Mn,1x1)  
LCS WG2225462-2

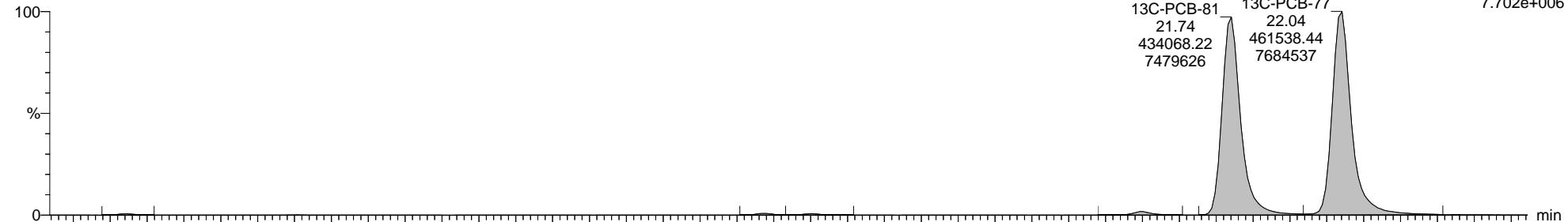
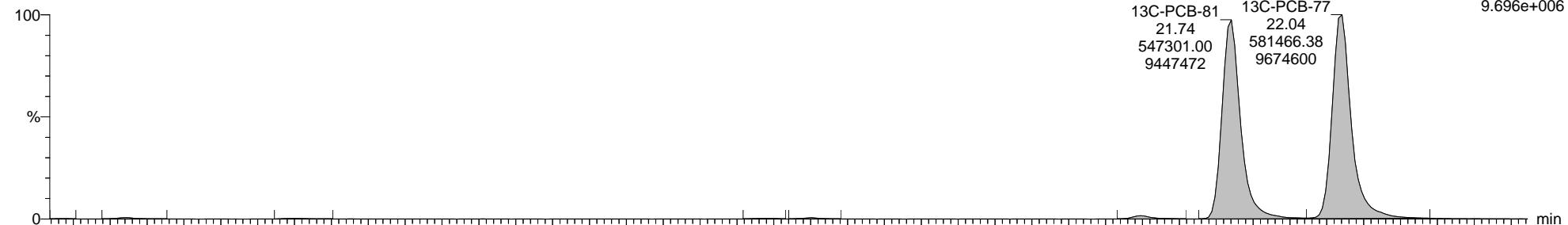
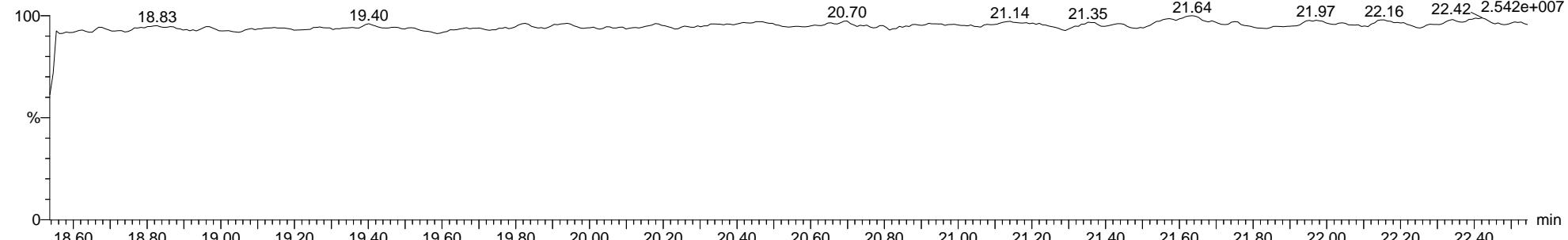


Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

Name: 5-151207C19, Date: 08-Dec-2015, Time: 03:02:08, ID: WG2225462-2, Description: LCS, Vial: Tray1:15

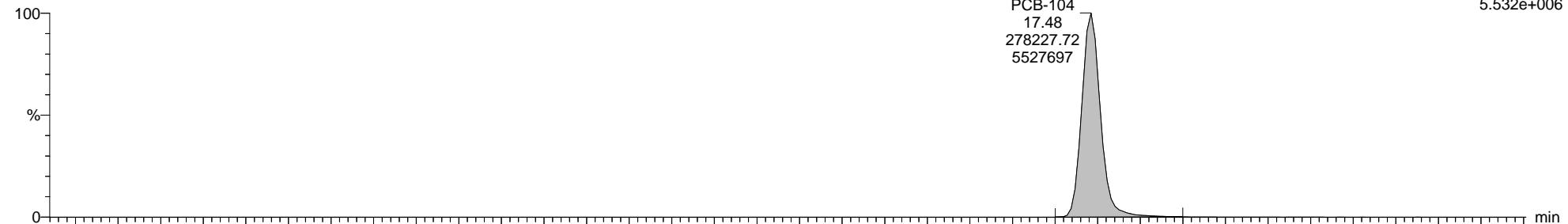
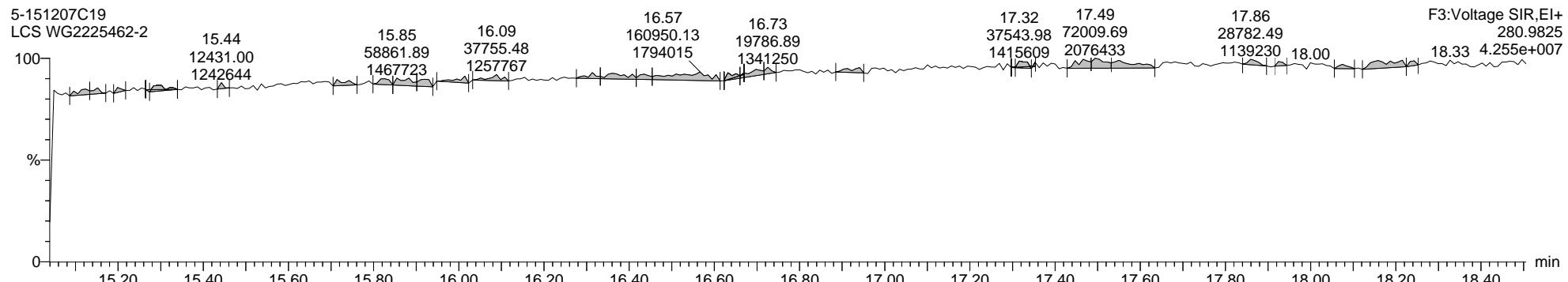
**13C-PCB-81**5-151207C19 Smooth(Mn,1x1)  
LCS WG2225462-25-151207C19 Smooth(Mn,1x1)  
LCS WG2225462-25-151207C19 Smooth(Mn,1x1)  
LCS WG2225462-2

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

Name: 5-151207C19, Date: 08-Dec-2015, Time: 03:02:08, ID: WG2225462-2, Description: LCS, Vial: Tray1:15

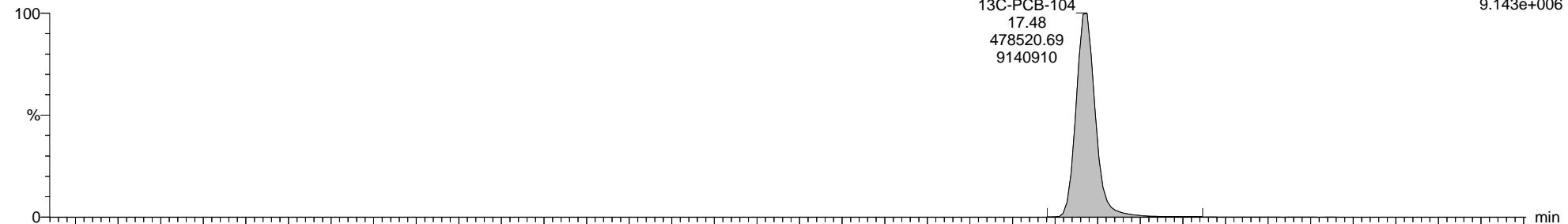
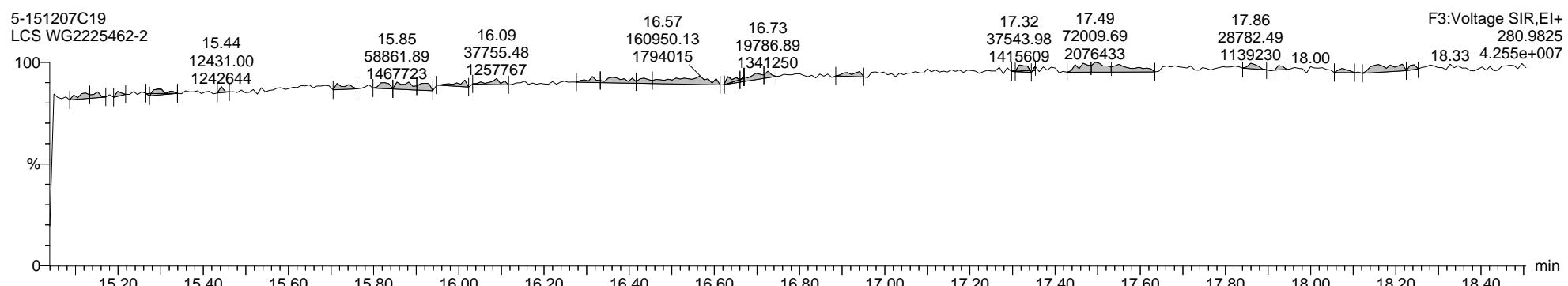
**PCB-104**5-151207C19 Smooth(Mn,1x1)  
LCS WG2225462-25-151207C19 Smooth(Mn,1x1)  
LCS WG2225462-25-151207C19  
LCS WG2225462-2

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

Name: 5-151207C19, Date: 08-Dec-2015, Time: 03:02:08, ID: WG2225462-2, Description: LCS, Vial: Tray1:15

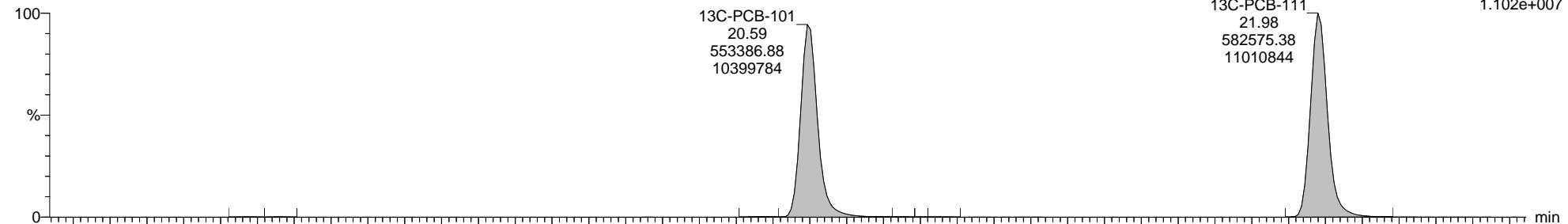
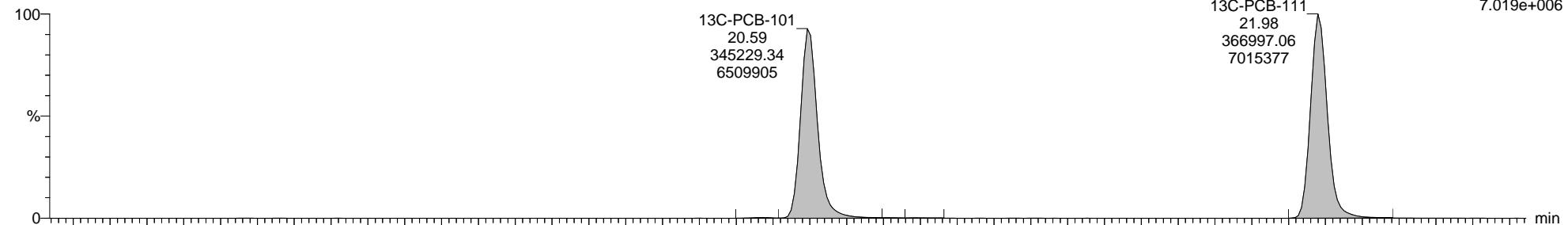
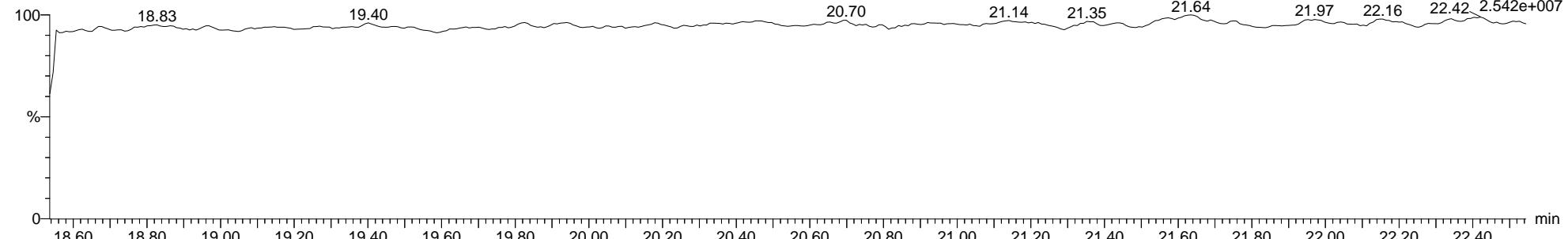
**13C-PCB-104**5-151207C19 Smooth(Mn,1x1)  
LCS WG2225462-25-151207C19 Smooth(Mn,1x1)  
LCS WG2225462-25-151207C19  
LCS WG2225462-2

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

Name: 5-151207C19, Date: 08-Dec-2015, Time: 03:02:08, ID: WG2225462-2, Description: LCS, Vial: Tray1:15

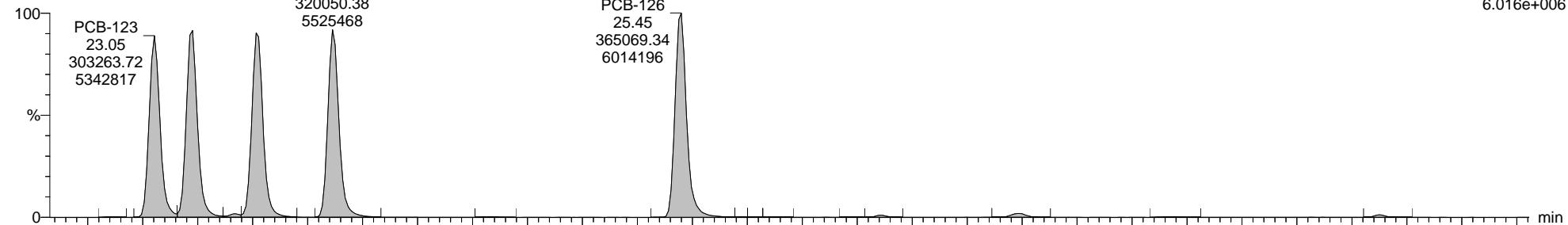
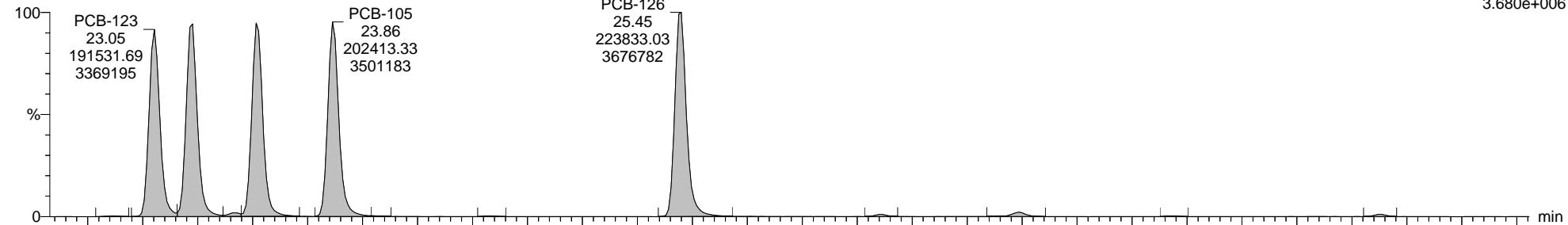
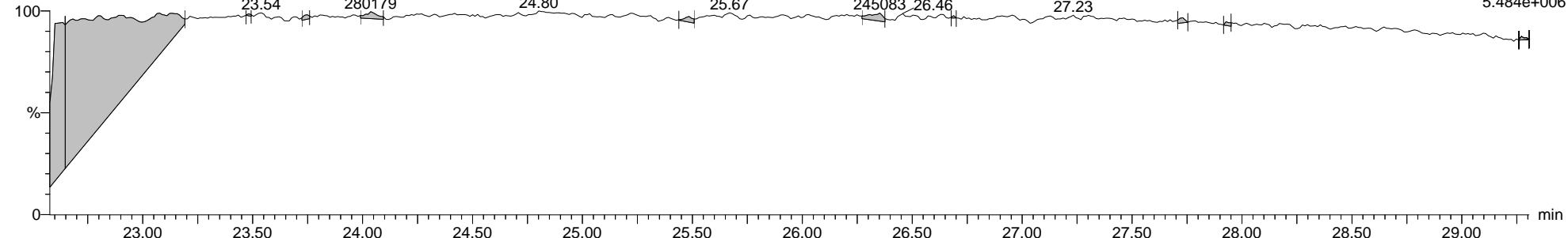
**13C-PCB-111**5-151207C19 Smooth(Mn,1x1)  
LCS WG2225462-25-151207C19 Smooth(Mn,1x1)  
LCS WG2225462-25-151207C19 Smooth(Mn,1x1)  
LCS WG2225462-2

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

Name: 5-151207C19, Date: 08-Dec-2015, Time: 03:02:08, ID: WG2225462-2, Description: LCS, Vial: Tray1:15

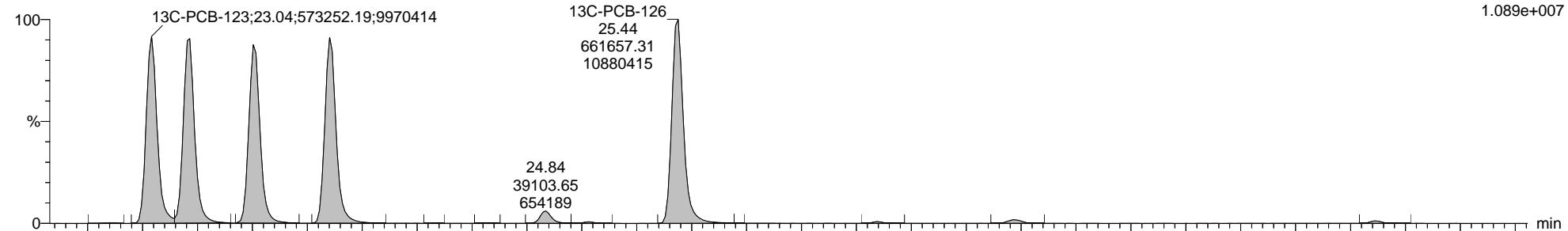
**PCB-123**5-151207C19 Smooth(Mn,1x1)  
LCS WG2225462-2PCB-105  
23.86  
320050.38  
5525468PCB-126  
25.45  
365069.34  
6014196F5:Voltage SIR,EI+  
325.8804  
6.016e+0065-151207C19 Smooth(Mn,1x1)  
LCS WG2225462-2PCB-105  
23.86  
202413.33  
3501183F5:Voltage SIR,EI+  
327.8775  
3.680e+0065-151207C19 Smooth(Mn,1x1)  
LCS WG2225462-223.54  
24.05  
11870.63  
280179  
24.80  
25.6726.35  
14722.39  
245083  
26.46  
27.23F5:Voltage SIR,EI+  
354.9792  
5.484e+006

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

Name: 5-151207C19, Date: 08-Dec-2015, Time: 03:02:08, ID: WG2225462-2, Description: LCS, Vial: Tray1:15

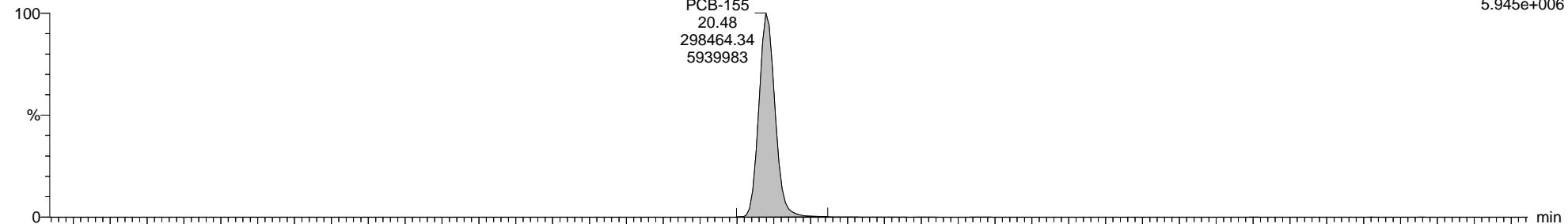
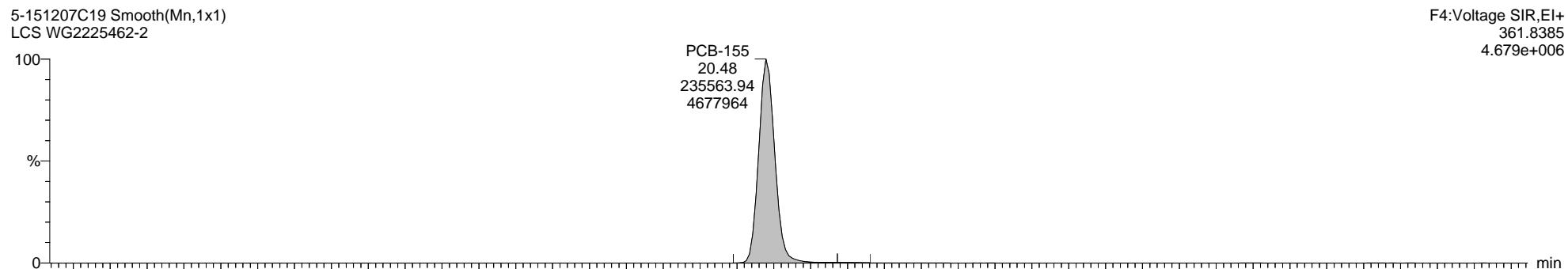
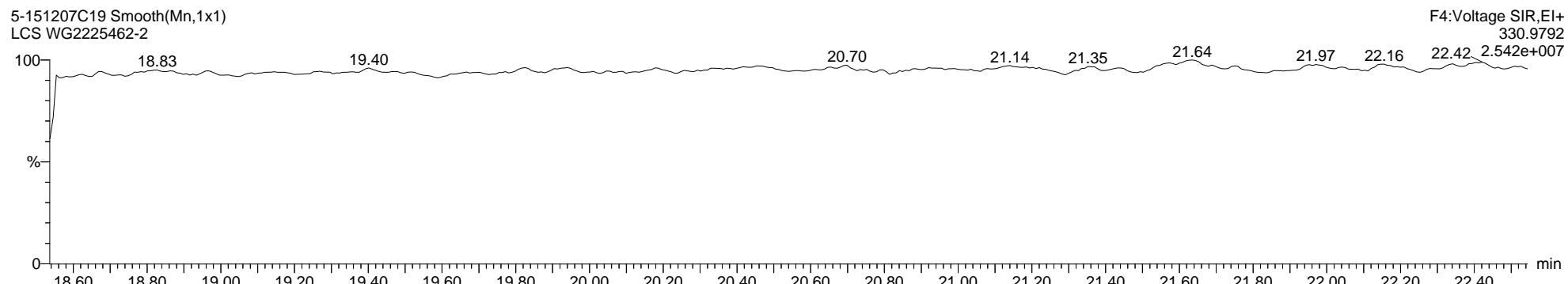
**13C-PCB-123**5-151207C19 Smooth(Mn,1x1)  
LCS WG2225462-25-151207C19 Smooth(Mn,1x1)  
LCS WG2225462-213C-PCB-105  
23.85  
368188.38  
6323950F5:Voltage SIR,EI+  
339.918  
6.883e+00613C-PCB-126  
25.44  
416683.69  
68773145-151207C19 Smooth(Mn,1x1)  
LCS WG2225462-224.05  
11870.63  
280179F5:Voltage SIR,EI+  
354.9792  
5.484e+00623.54  
24.80  
25.6724.35  
14722.39  
245083  
26.46

27.23

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

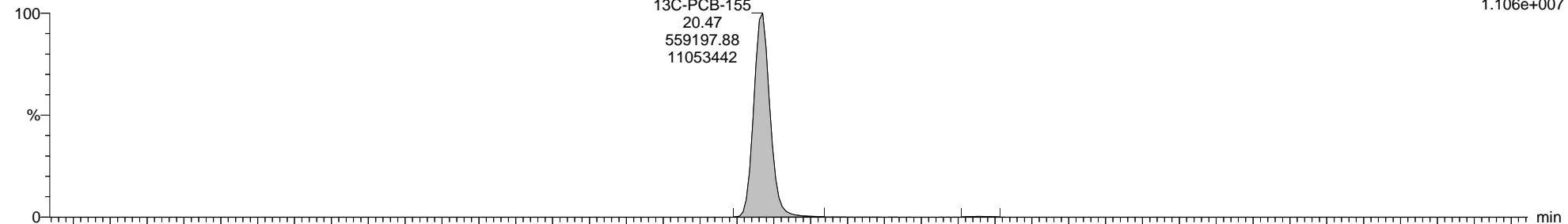
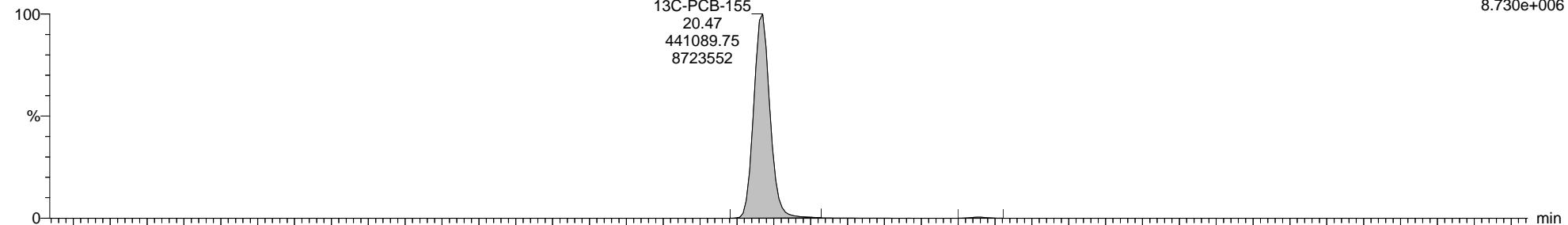
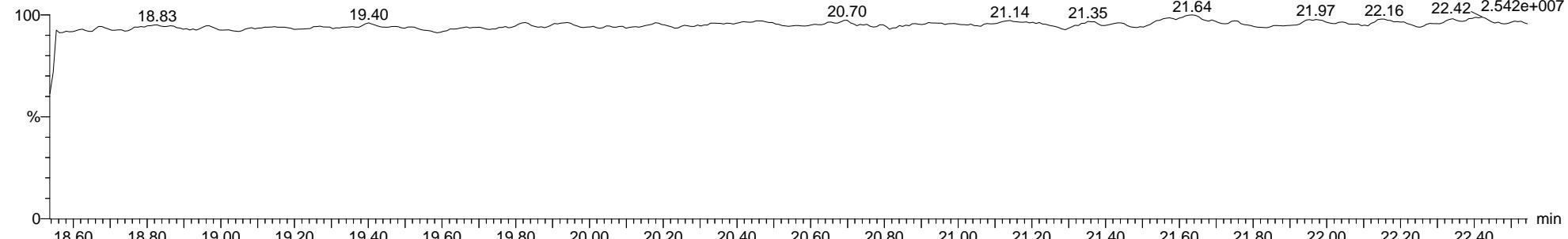
Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

**Name: 5-151207C19, Date: 08-Dec-2015, Time: 03:02:08, ID: WG2225462-2, Description: LCS, Vial: Tray1:15****PCB-155**5-151207C19 Smooth(Mn,1x1)  
LCS WG2225462-25-151207C19 Smooth(Mn,1x1)  
LCS WG2225462-25-151207C19 Smooth(Mn,1x1)  
LCS WG2225462-2

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

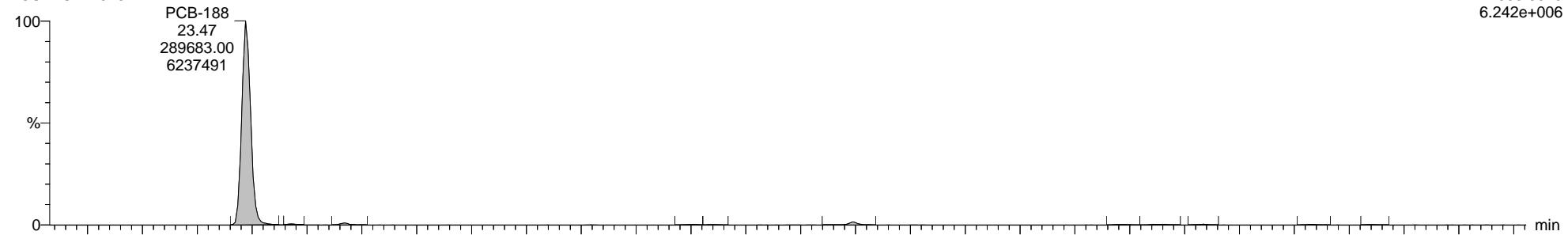
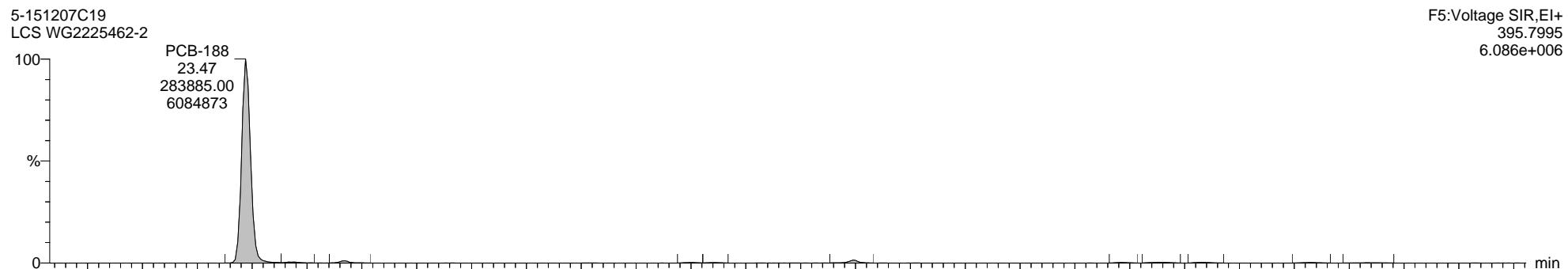
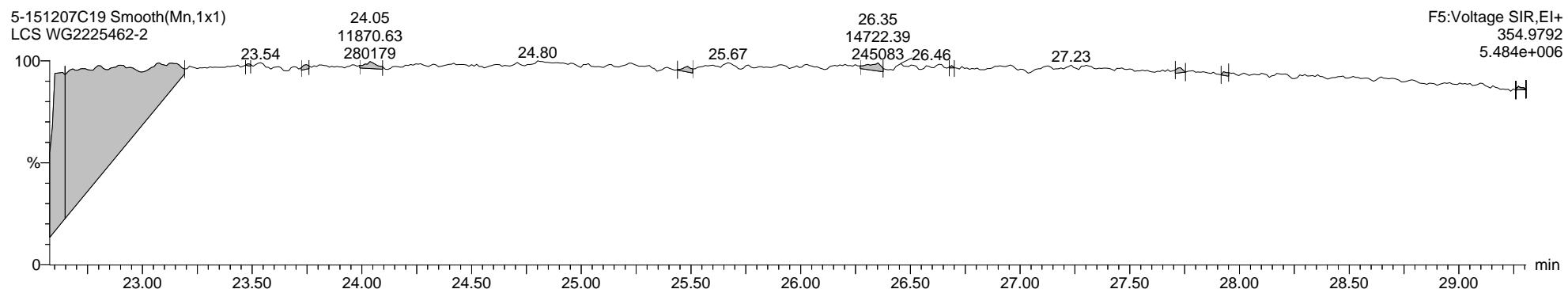
**Name: 5-151207C19, Date: 08-Dec-2015, Time: 03:02:08, ID: WG2225462-2, Description: LCS, Vial: Tray1:15****13C-PCB-155**5-151207C19 Smooth(Mn,1x1)  
LCS WG2225462-25-151207C19 Smooth(Mn,1x1)  
LCS WG2225462-2F4:Voltage SIR,EI+  
373.8789  
8.730e+0065-151207C19 Smooth(Mn,1x1)  
LCS WG2225462-2F4:Voltage SIR,EI+  
330.9792  
2.542e+007

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

Name: 5-151207C19, Date: 08-Dec-2015, Time: 03:02:08, ID: WG2225462-2, Description: LCS, Vial: Tray1:15

**PCB-188**5-151207C19  
LCS WG2225462-25-151207C19  
LCS WG2225462-25-151207C19 Smooth(Mn,1x1)  
LCS WG2225462-2

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

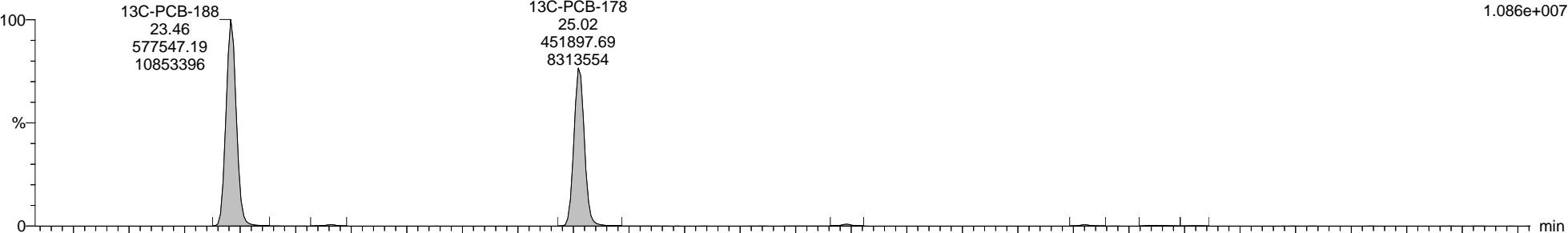
Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

Name: 5-151207C19, Date: 08-Dec-2015, Time: 03:02:08, ID: WG2225462-2, Description: LCS, Vial: Tray1:15

**13C-PCB-188**

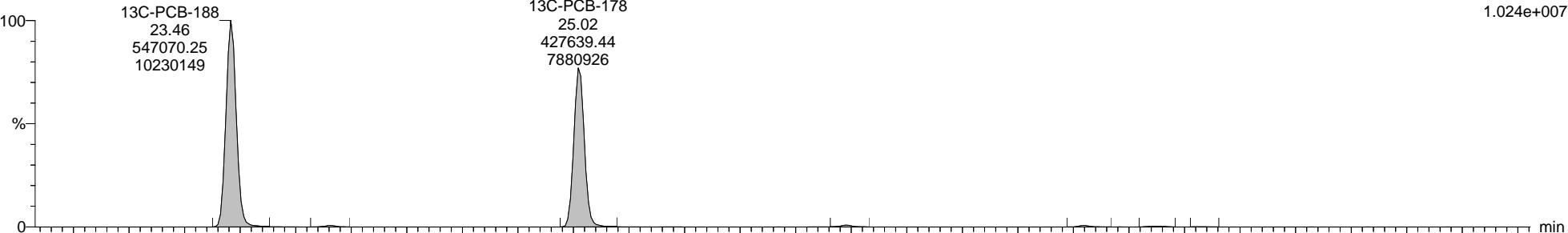
5-151207C19 Smooth(Mn,1x1)

LCS WG2225462-2



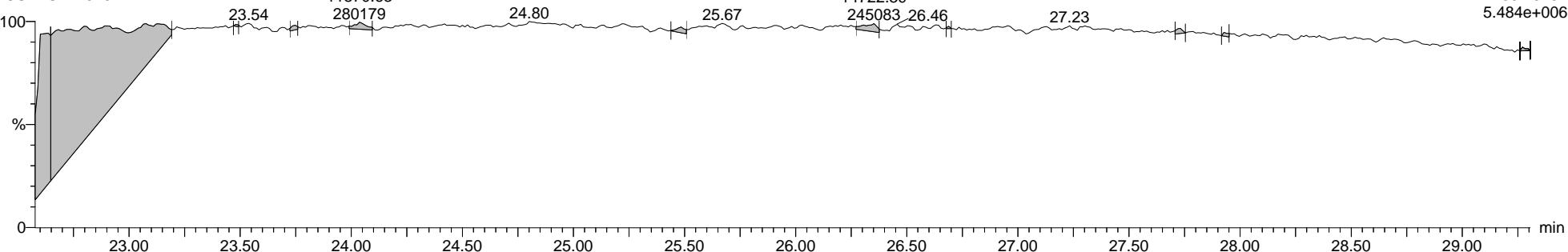
5-151207C19 Smooth(Mn,1x1)

LCS WG2225462-2



5-151207C19 Smooth(Mn,1x1)

LCS WG2225462-2

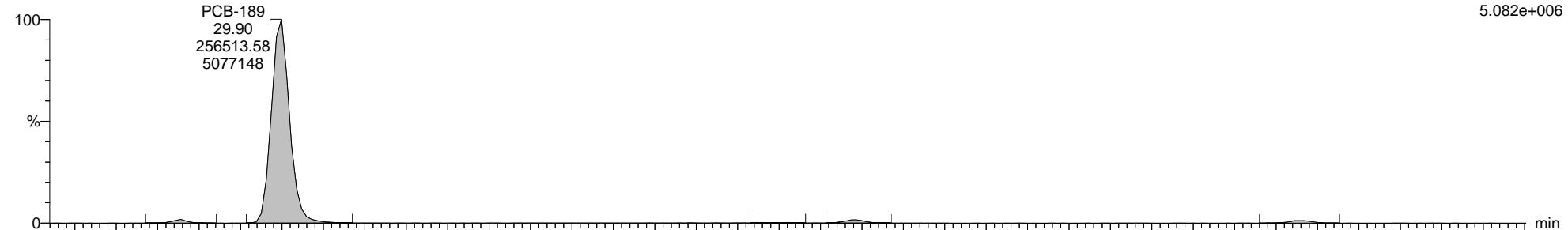
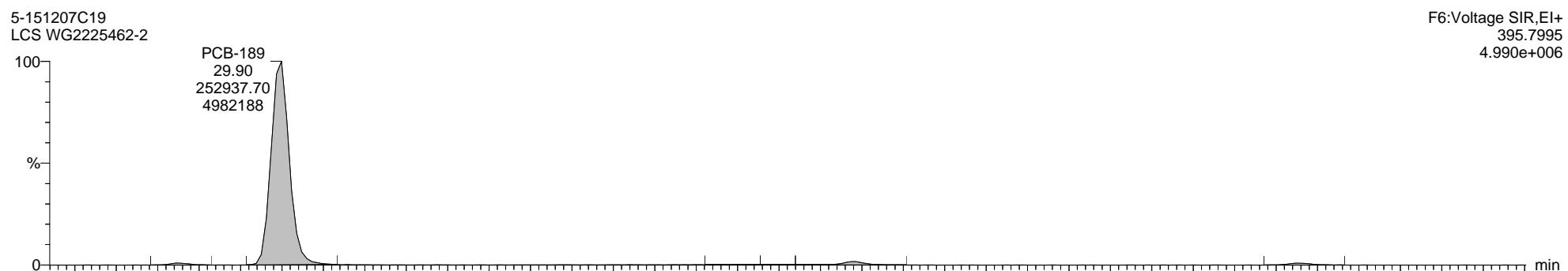
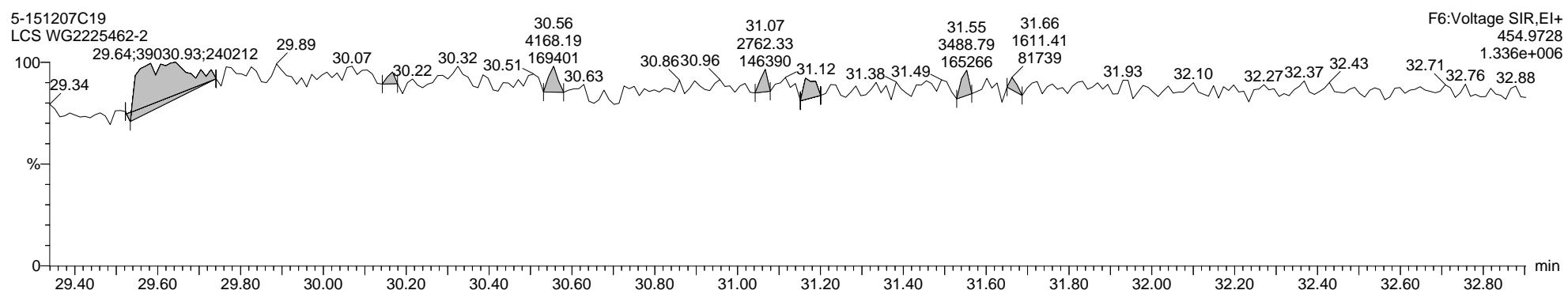


Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

Name: 5-151207C19, Date: 08-Dec-2015, Time: 03:02:08, ID: WG2225462-2, Description: LCS, Vial: Tray1:15

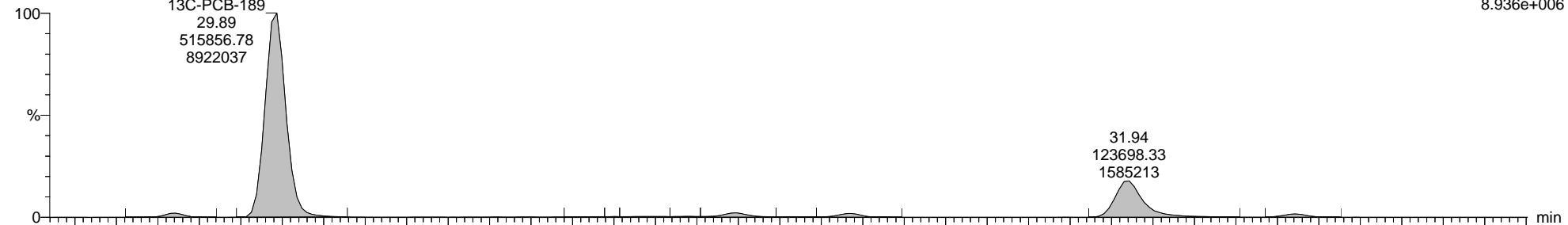
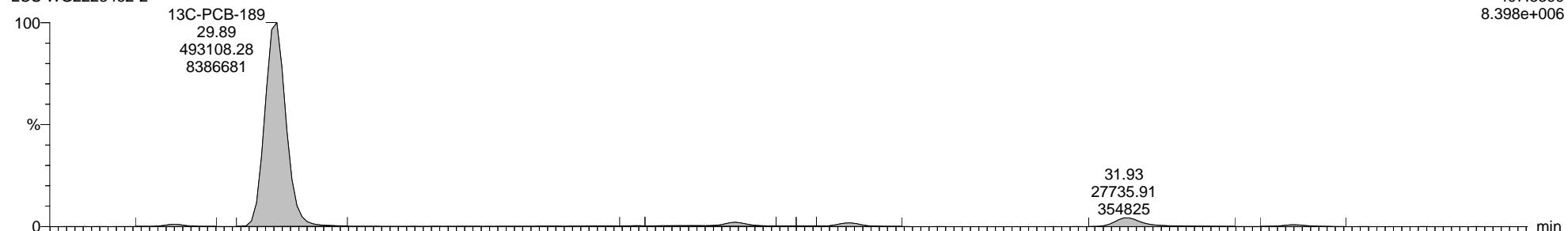
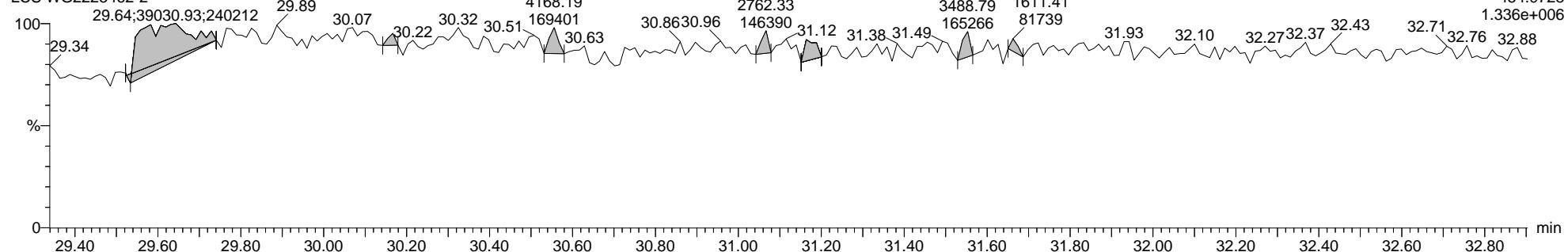
**PCB-189**5-151207C19  
LCS WG2225462-25-151207C19  
LCS WG2225462-25-151207C19  
LCS WG2225462-2

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

Name: 5-151207C19, Date: 08-Dec-2015, Time: 03:02:08, ID: WG2225462-2, Description: LCS, Vial: Tray1:15

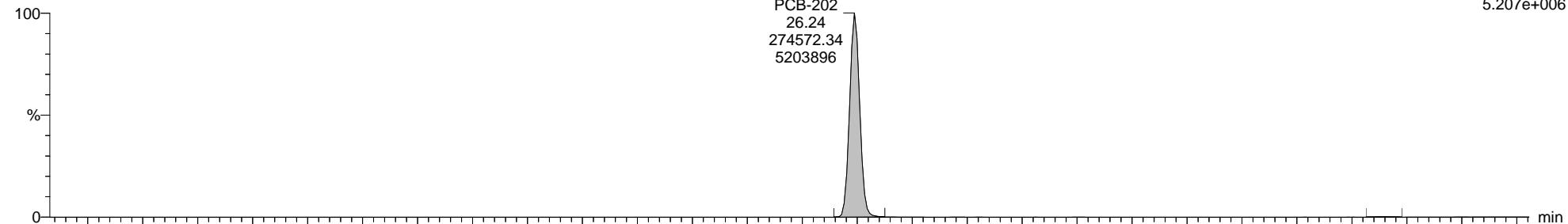
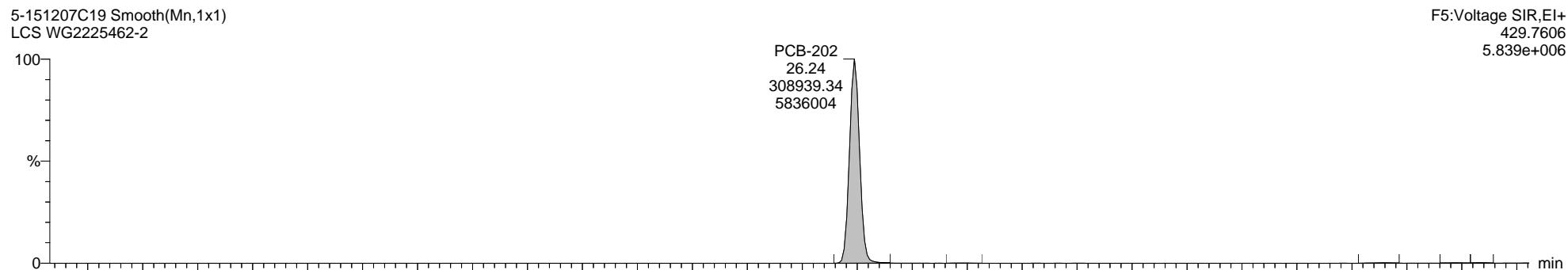
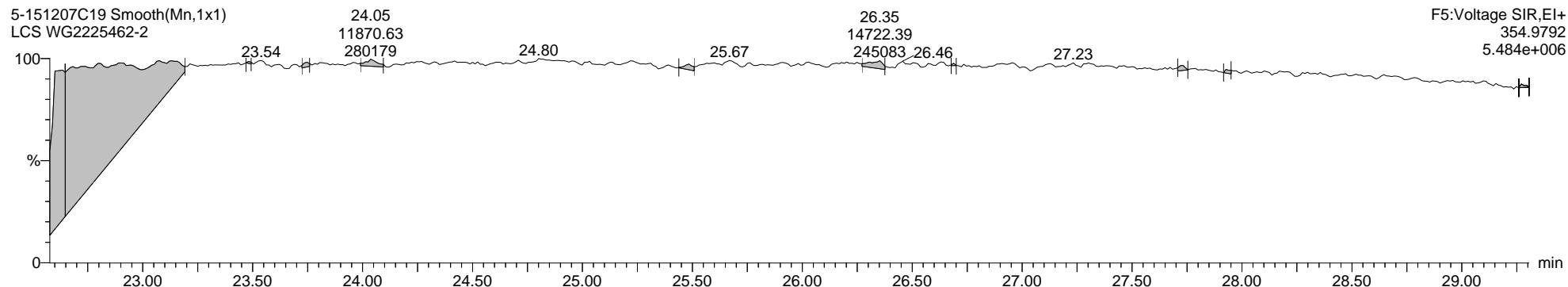
**13C-PCB-189**5-151207C19 Smooth(Mn,1x1)  
LCS WG2225462-25-151207C19 Smooth(Mn,1x1)  
LCS WG2225462-25-151207C19  
LCS WG2225462-2

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

Name: 5-151207C19, Date: 08-Dec-2015, Time: 03:02:08, ID: WG2225462-2, Description: LCS, Vial: Tray1:15

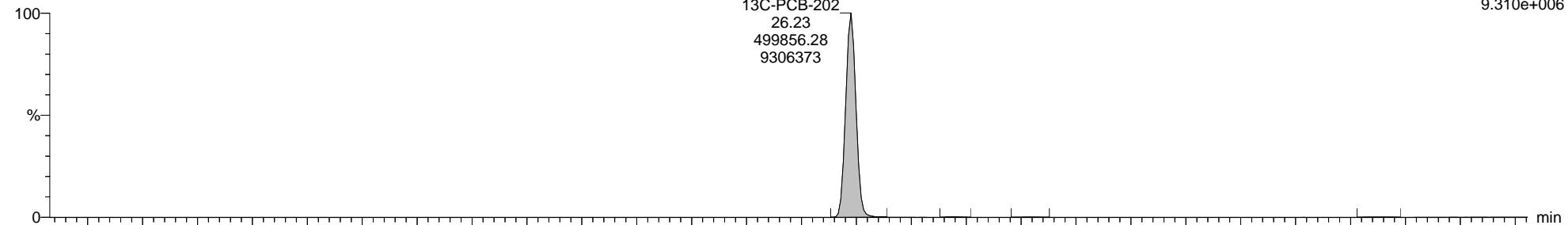
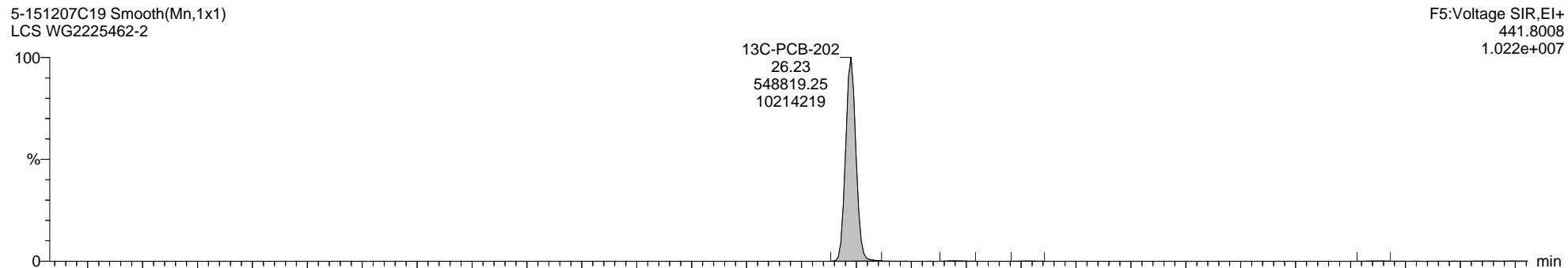
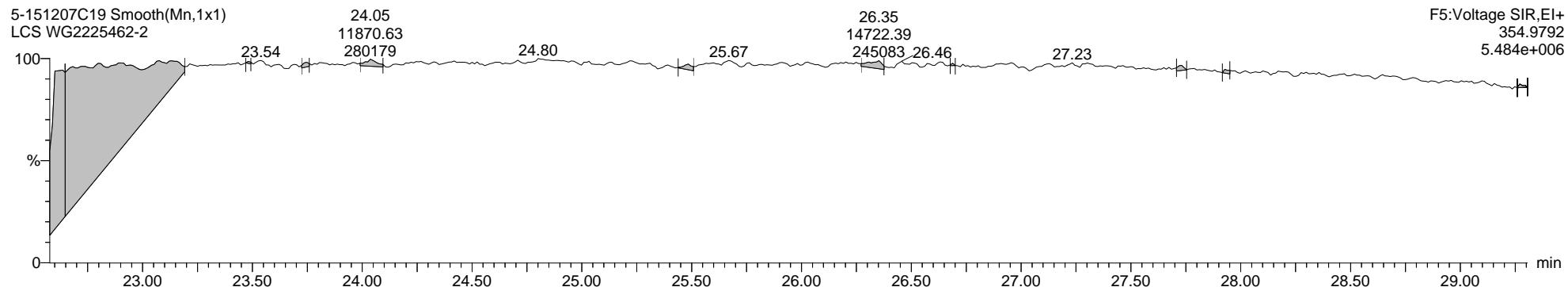
**PCB-202**5-151207C19 Smooth(Mn,1x1)  
LCS WG2225462-25-151207C19 Smooth(Mn,1x1)  
LCS WG2225462-25-151207C19 Smooth(Mn,1x1)  
LCS WG2225462-2

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

Name: 5-151207C19, Date: 08-Dec-2015, Time: 03:02:08, ID: WG2225462-2, Description: LCS, Vial: Tray1:15

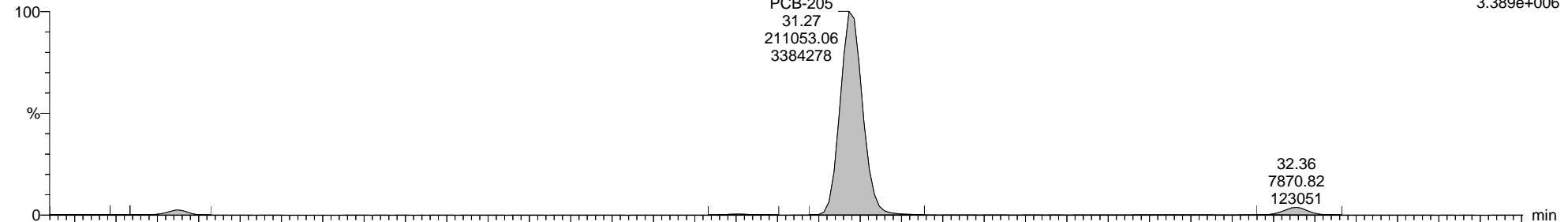
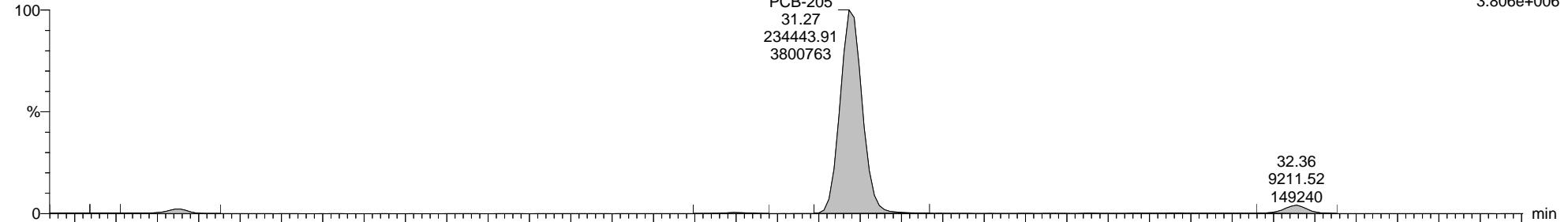
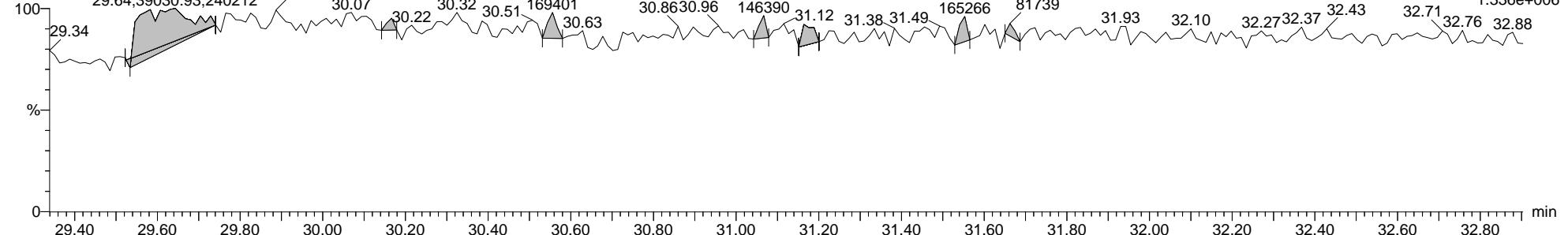
**13C-PCB-202**5-151207C19 Smooth(Mn,1x1)  
LCS WG2225462-25-151207C19 Smooth(Mn,1x1)  
LCS WG2225462-25-151207C19 Smooth(Mn,1x1)  
LCS WG2225462-2

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

Name: 5-151207C19, Date: 08-Dec-2015, Time: 03:02:08, ID: WG2225462-2, Description: LCS, Vial: Tray1:15

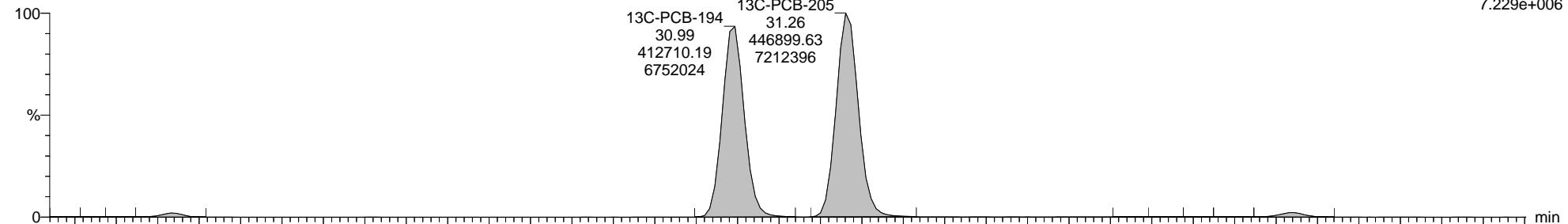
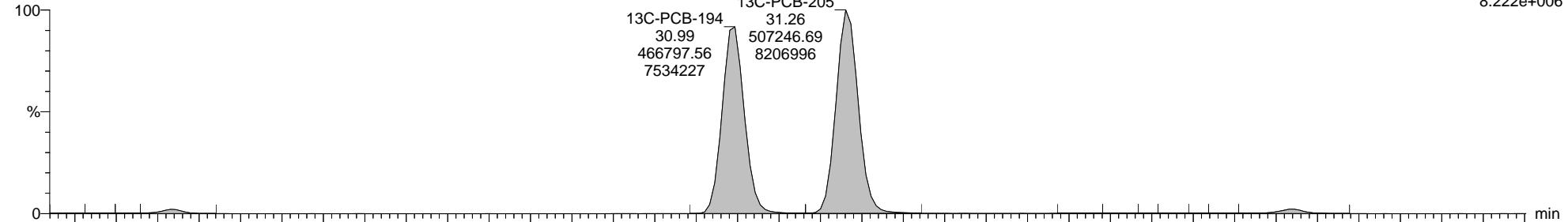
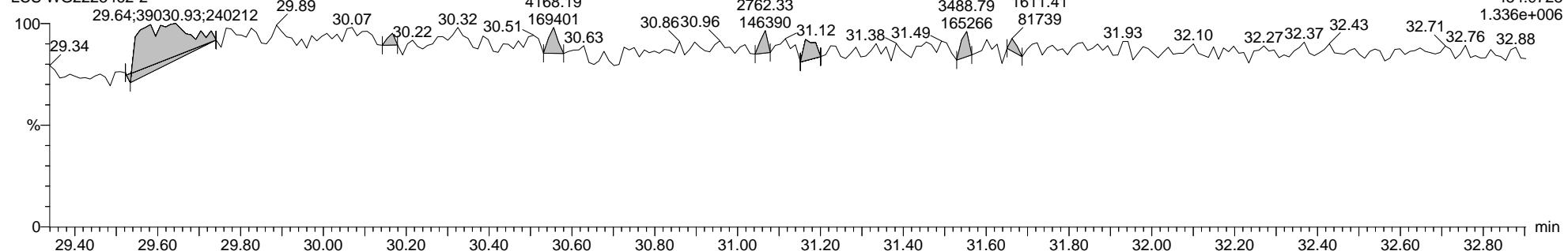
**PCB-205**5-151207C19 Smooth(Mn,1x1)  
LCS WG2225462-2F6:Voltage SIR,EI+  
427.7635  
3.389e+0065-151207C19 Smooth(Mn,1x1)  
LCS WG2225462-2F6:Voltage SIR,EI+  
429.7606  
3.806e+0065-151207C19  
LCS WG2225462-2F6:Voltage SIR,EI+  
454.9728  
1.336e+006

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

Name: 5-151207C19, Date: 08-Dec-2015, Time: 03:02:08, ID: WG2225462-2, Description: LCS, Vial: Tray1:15

**13C-PCB-205**5-151207C19 Smooth(Mn,1x1)  
LCS WG2225462-2F6:Voltage SIR,EI+  
439.8038  
7.229e+0065-151207C19 Smooth(Mn,1x1)  
LCS WG2225462-2F6:Voltage SIR,EI+  
441.8008  
8.222e+0065-151207C19  
LCS WG2225462-2F6:Voltage SIR,EI+  
454.9728  
1.336e+006

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

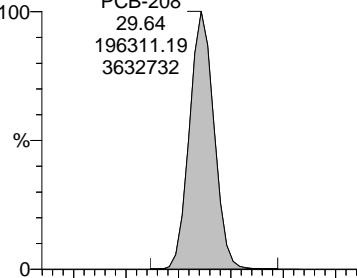
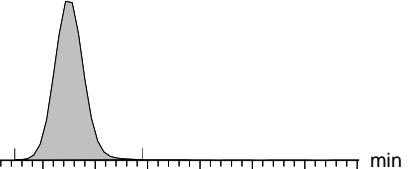
Name: 5-151207C19, Date: 08-Dec-2015, Time: 03:02:08, ID: WG2225462-2, Description: LCS, Vial: Tray1:15

**PCB-208**

5-151207C19 Smooth(Mn,1x1)

LCS WG2225462-2

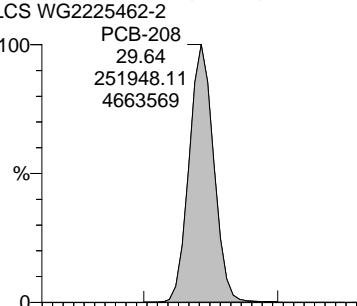
PCB-208

29.64  
196311.19  
3632732F6:Voltage SIR, EI+  
461.7246  
3.636e+006PCB-206  
32.34  
148291.67  
2235606

5-151207C19 Smooth(Mn,1x1)

LCS WG2225462-2

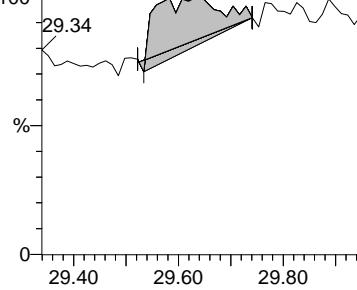
PCB-208

29.64  
251948.11  
4663569F6:Voltage SIR, EI+  
463.7216  
4.668e+006PCB-206  
32.34  
185611.45  
2786249

5-151207C19

LCS WG2225462-2

29.64;39030.93;240212

29.89  
30.07  
30.22  
30.32  
30.51  
30.63F6:Voltage SIR, EI+  
454.9728  
1.336e+006

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

Name: 5-151207C19, Date: 08-Dec-2015, Time: 03:02:08, ID: WG2225462-2, Description: LCS, Vial: Tray1:15

**13C-PCB-208**

5-151207C19 Smooth(Mn,1x1)

LCS WG2225462-2

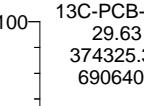
13C-PCB-208

29.63

374325.31

6906403

%



F6:Voltage SIR,EI+

473.7648

6.911e+006

**13C-PCB-206**

32.33

265311.25

3998597

F6:Voltage SIR,EI+

475.7619

8.888e+006

5-151207C19 Smooth(Mn,1x1)

LCS WG2225462-2

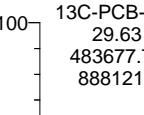
13C-PCB-208

29.63

483677.78

8881218

%

**13C-PCB-206**

32.33

340971.41

5123119

F6:Voltage SIR,EI+

454.9728

1.336e+006

5-151207C19

LCS WG2225462-2

29.64;39030.93;240212

29.89

30.07

30.22

30.32

30.51

30.63

30.56

4168.19

169401

30.86

30.96

31.07

2762.33

146390

31.12

31.38

31.49

31.55

3488.79

165266

31.66

1611.41

81739

31.93

32.10

32.27

32.37

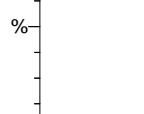
32.43

32.71

32.76

32.88

%



Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

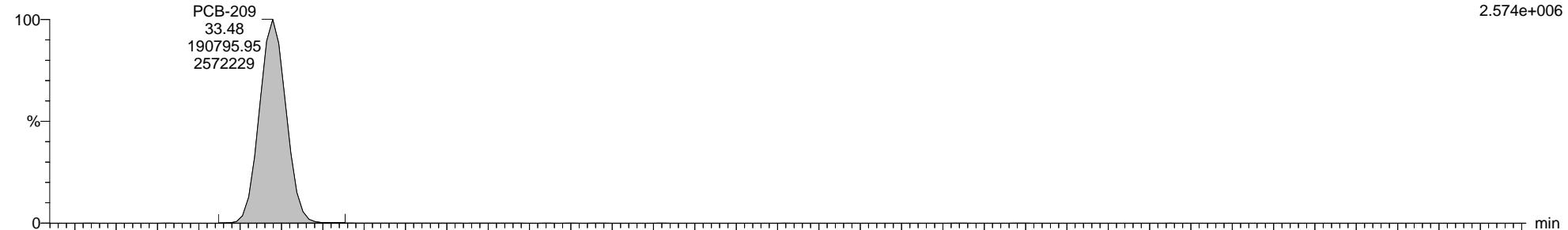
Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

**Name: 5-151207C19, Date: 08-Dec-2015, Time: 03:02:08, ID: WG2225462-2, Description: LCS, Vial: Tray1:15****PCB-209**

5-151207C19 Smooth(Mn,1x1)

LCS WG2225462-2



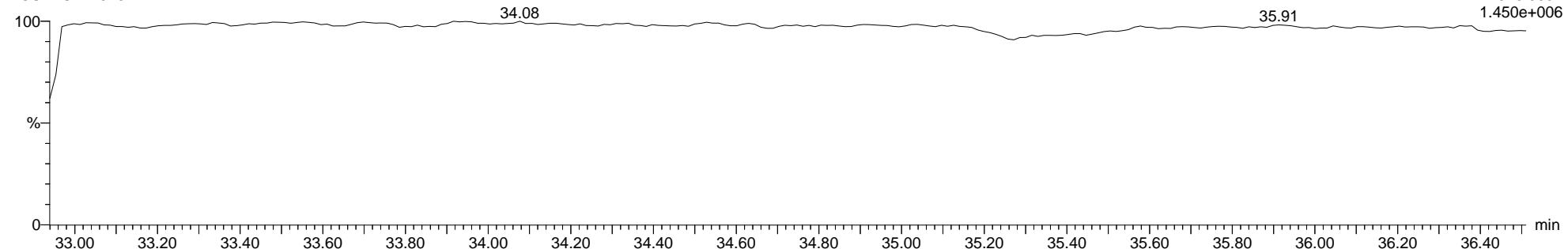
5-151207C19 Smooth(Mn,1x1)

LCS WG2225462-2



5-151207C19 Smooth(Mn,1x1)

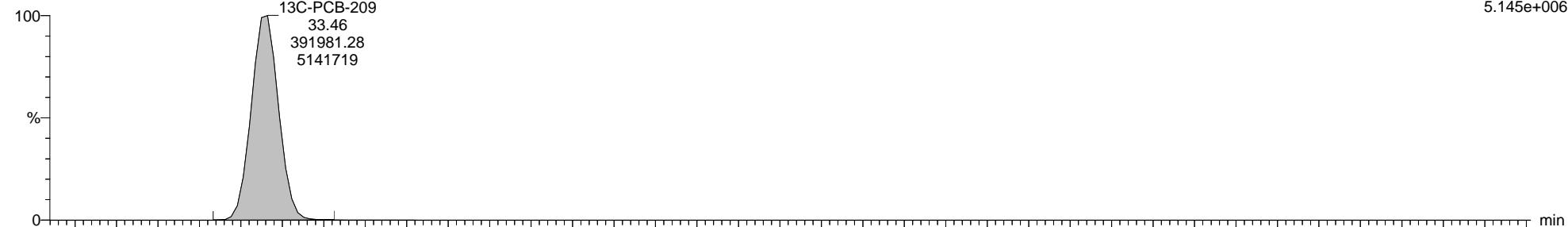
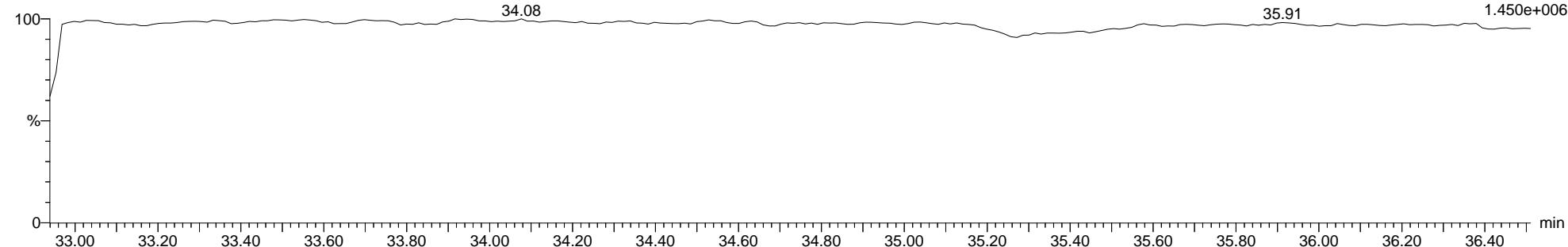
LCS WG2225462-2



Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

**Name: 5-151207C19, Date: 08-Dec-2015, Time: 03:02:08, ID: WG2225462-2, Description: LCS, Vial: Tray1:15****13C-PCB-209**5-151207C19 Smooth(Mn,1x1)  
LCS WG2225462-25-151207C19 Smooth(Mn,1x1)  
LCS WG2225462-25-151207C19 Smooth(Mn,1x1)  
LCS WG2225462-2

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

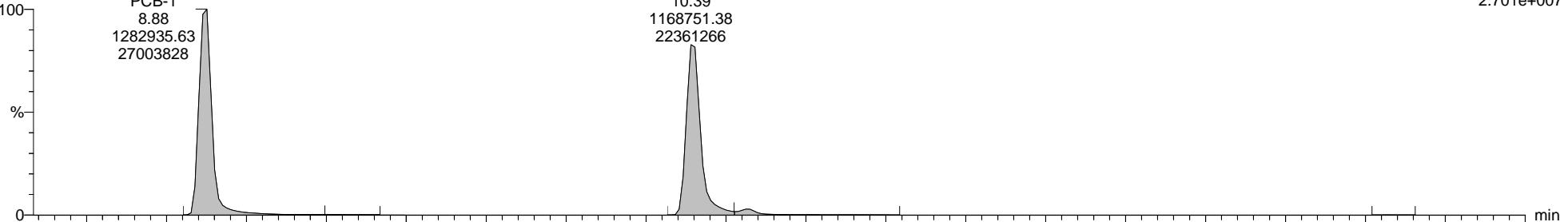
Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

Name: 5-151207C32, Date: 08-Dec-2015, Time: 11:35:53, ID: H5-15-CCV-575, Description: 1668A-CS#3-015, Vial: Tray1:3

**PCB-1**

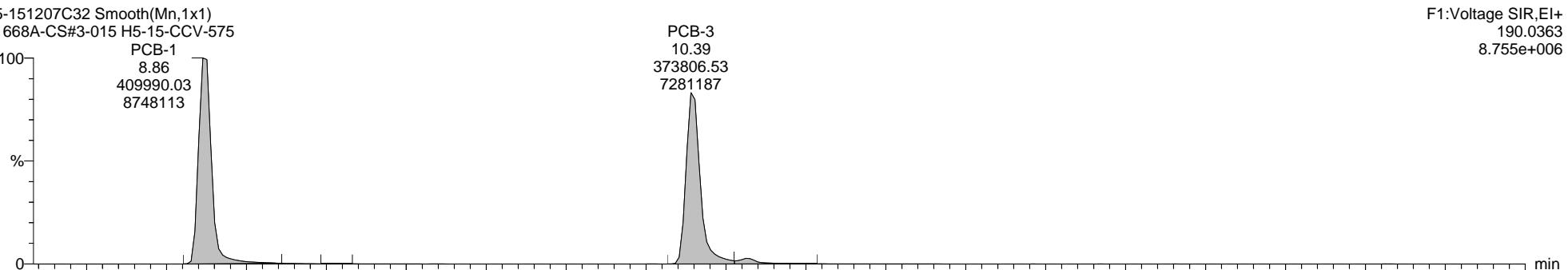
5-151207C32 Smooth(Mn,1x1)

1668A-CS#3-015 H5-15-CCV-575

PCB-1  
8.88  
1282935.63  
27003828PCB-3  
10.39  
1168751.38  
22361266F1:Voltage SIR,EI+  
188.0393  
2.701e+007

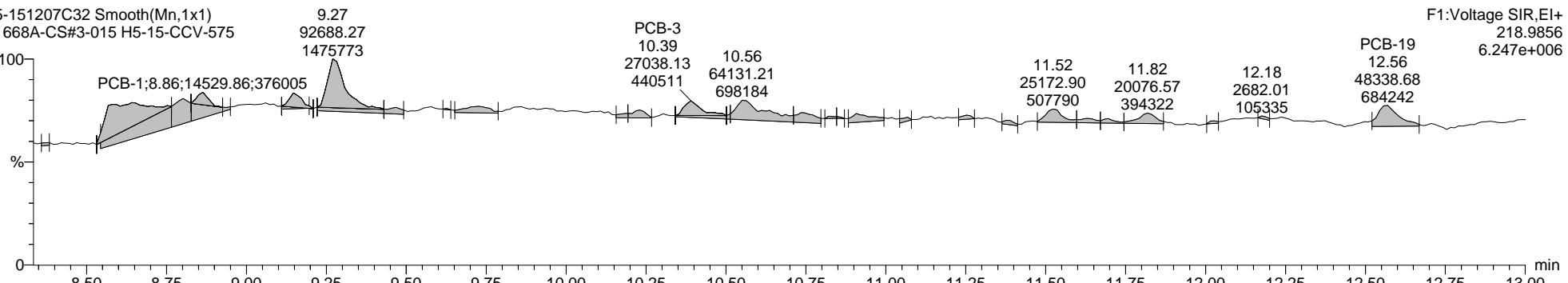
5-151207C32 Smooth(Mn,1x1)

1668A-CS#3-015 H5-15-CCV-575

PCB-1  
8.86  
409990.03  
8748113PCB-3  
10.39  
373806.53  
7281187F1:Voltage SIR,EI+  
190.0363  
8.755e+006

5-151207C32 Smooth(Mn,1x1)

1668A-CS#3-015 H5-15-CCV-575

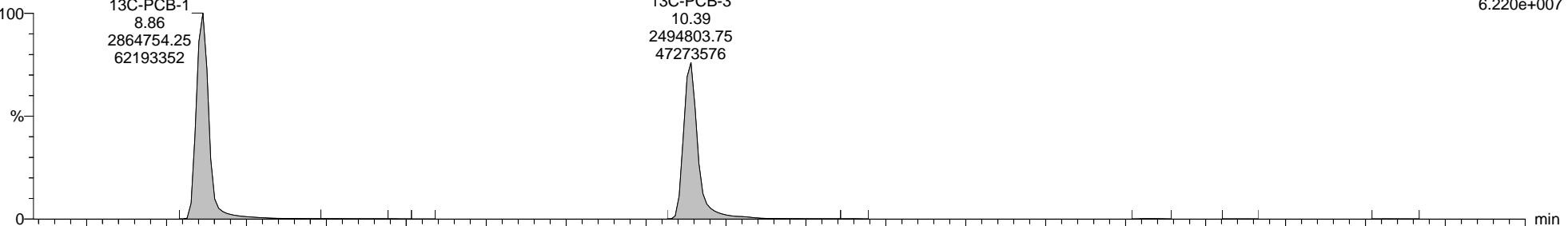
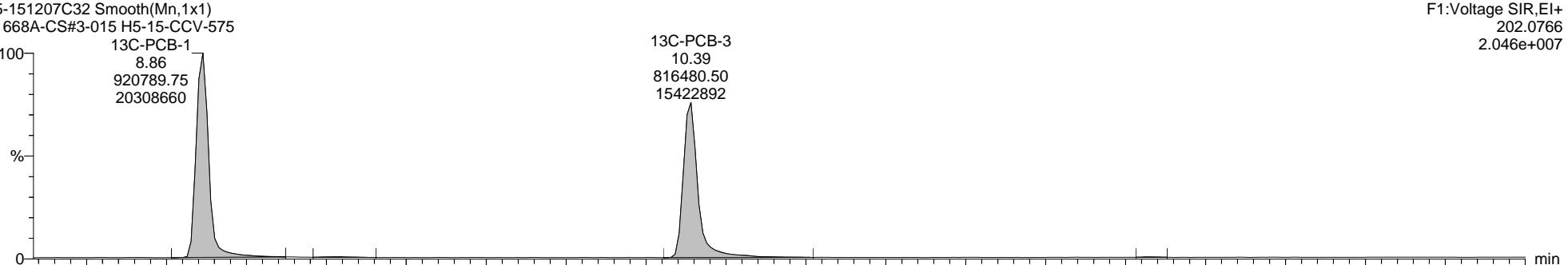
PCB-1;8.86;14529.86;376005  
9.27  
92688.27  
1475773PCB-3  
10.39  
27038.13  
440511  
10.56  
64131.21  
698184F1:Voltage SIR,EI+  
218.9856  
6.247e+006

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

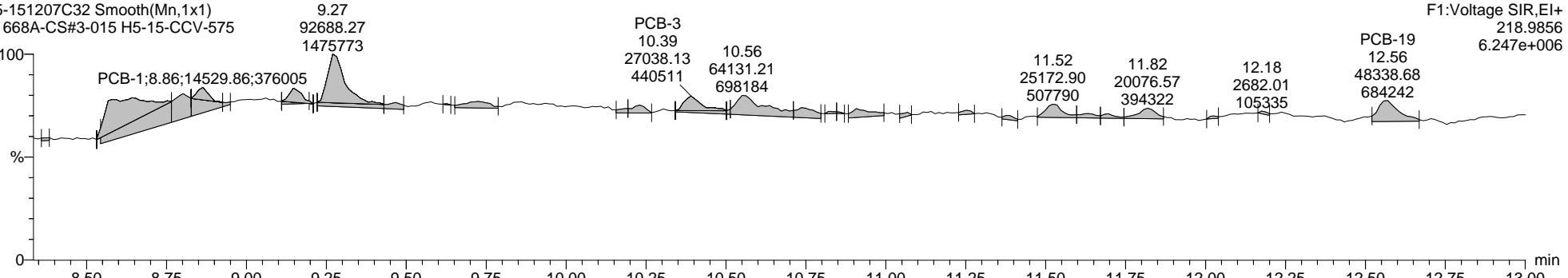
Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

Name: 5-151207C32, Date: 08-Dec-2015, Time: 11:35:53, ID: H5-15-CCV-575, Description: 1668A-CS#3-015, Vial: Tray1:3

**13C-PCB-1**5-151207C32 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-57513C-PCB-1  
8.86  
2864754.25  
6219335213C-PCB-3  
10.39  
2494803.75  
47273576F1:Voltage SIR,EI+  
200.0795  
6.220e+0075-151207C32 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-57513C-PCB-1  
8.86  
920789.75  
2030866013C-PCB-3  
10.39  
816480.50  
15422892F1:Voltage SIR,EI+  
202.0766  
2.046e+0075-151207C32 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-575

PCB-1;8.86;14529.86;376005

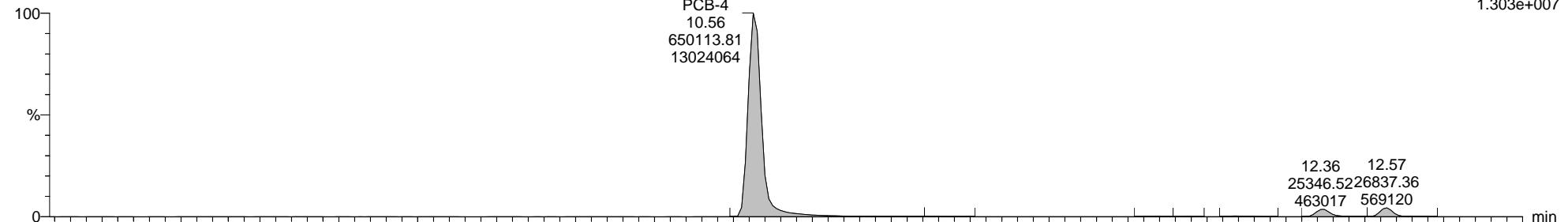
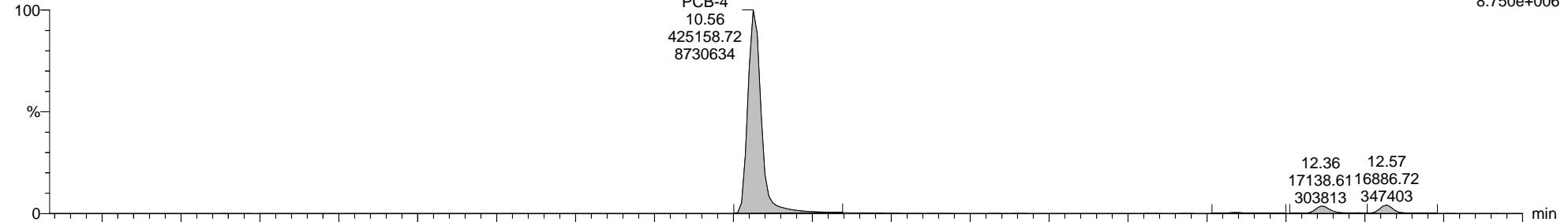
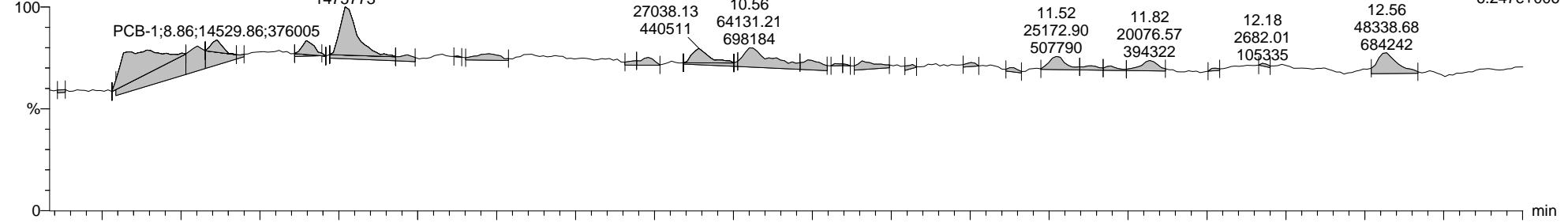
9.27  
92688.27  
1475773PCB-3  
10.39  
27038.13  
440511  
10.56  
64131.21  
698184F1:Voltage SIR,EI+  
218.9856  
6.247e+006PCB-19  
12.56  
48338.68  
684242

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

Name: 5-151207C32, Date: 08-Dec-2015, Time: 11:35:53, ID: H5-15-CCV-575, Description: 1668A-CS#3-015, Vial: Tray1:3

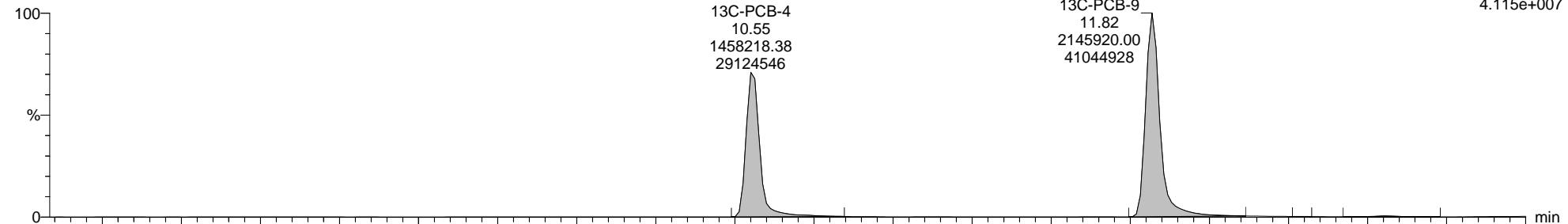
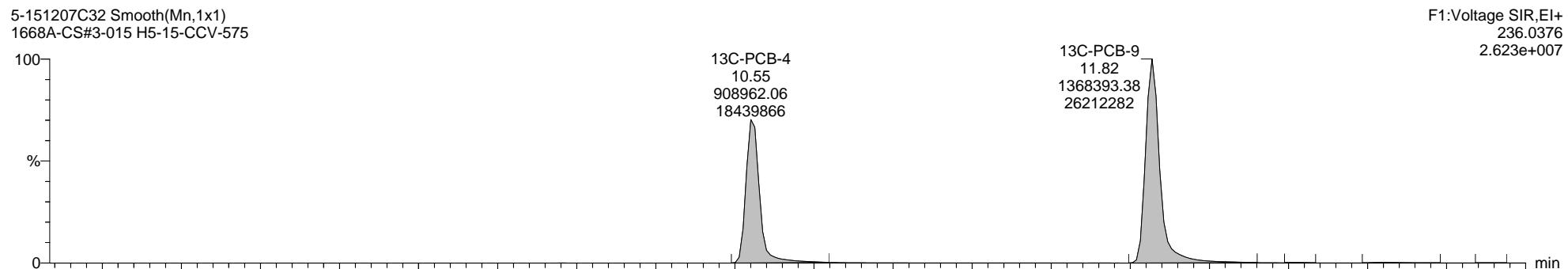
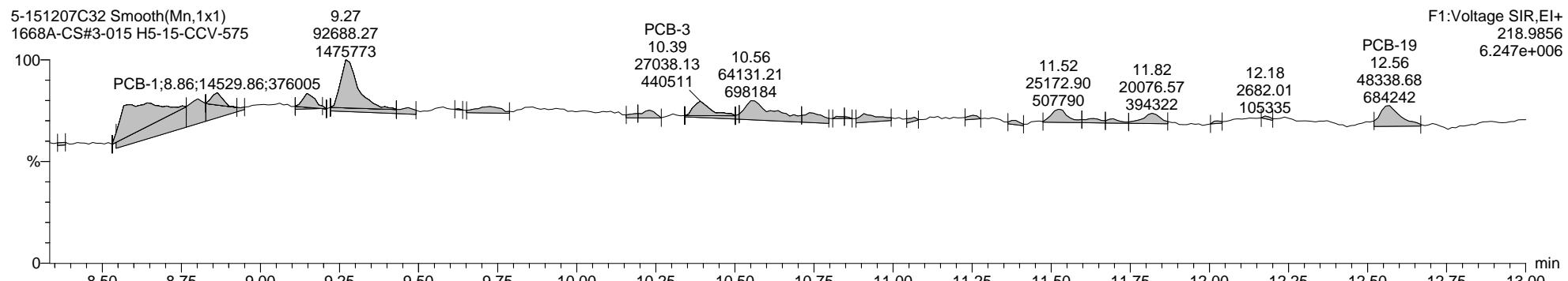
**PCB-4**5-151207C32 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-575F1:Voltage SIR,EI+  
222.0003  
1.303e+0075-151207C32 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-575F1:Voltage SIR,EI+  
223.9974  
8.750e+0065-151207C32 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-575F1:Voltage SIR,EI+  
218.9856  
6.247e+006

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

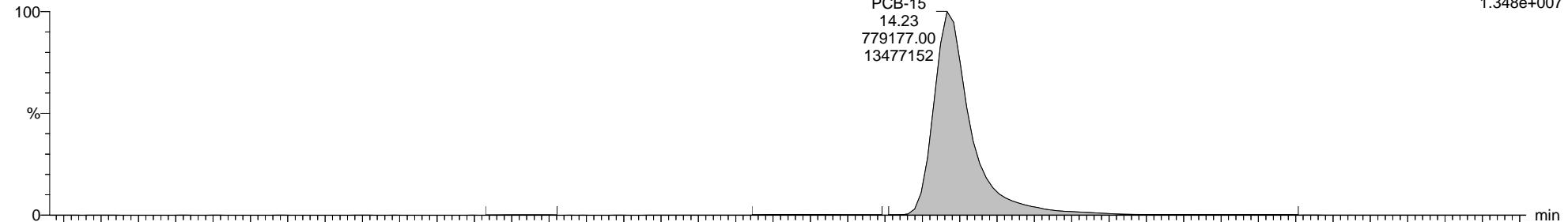
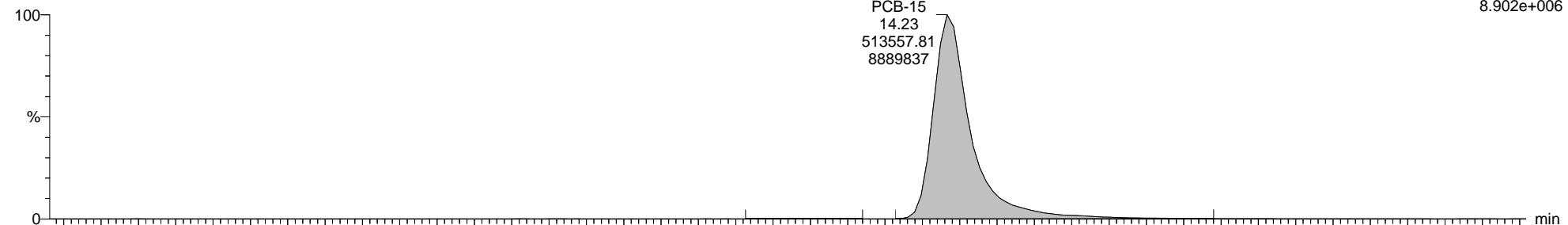
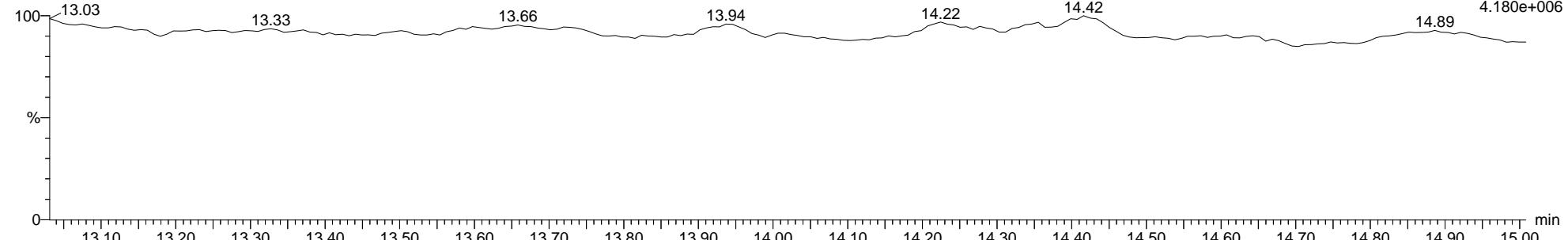
Name: 5-151207C32, Date: 08-Dec-2015, Time: 11:35:53, ID: H5-15-CCV-575, Description: 1668A-CS#3-015, Vial: Tray1:3

**13C-PCB-4**5-151207C32 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-5755-151207C32 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-5755-151207C32 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-575

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

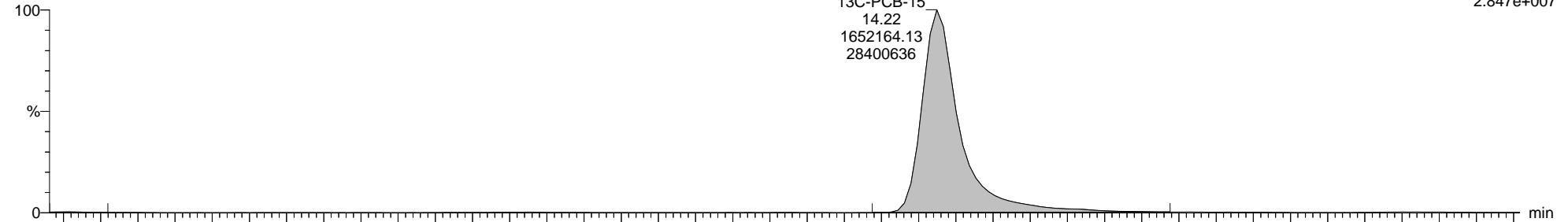
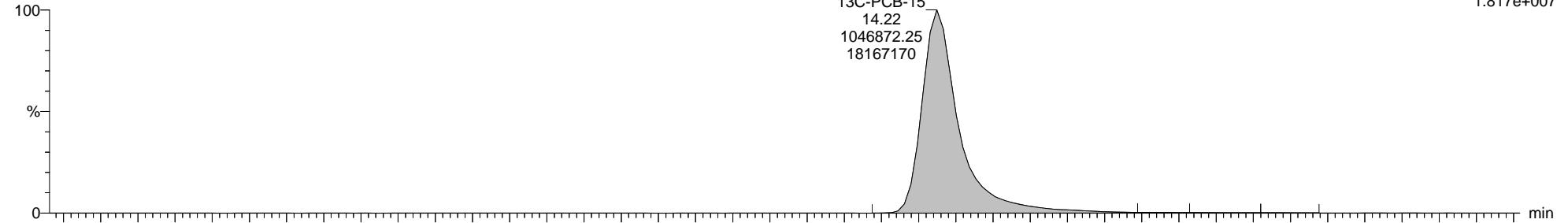
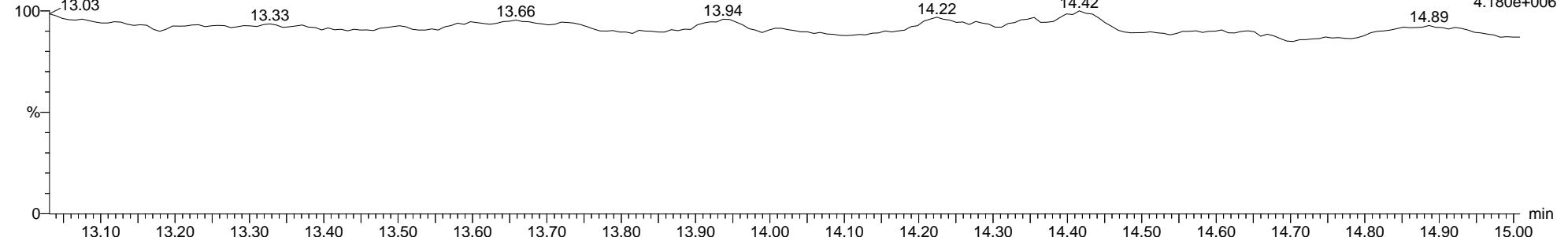
Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

**Name: 5-151207C32, Date: 08-Dec-2015, Time: 11:35:53, ID: H5-15-CCV-575, Description: 1668A-CS#3-015, Vial: Tray1:3****PCB-15**5-151207C32 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-5755-151207C32 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-5755-151207C32 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-575

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

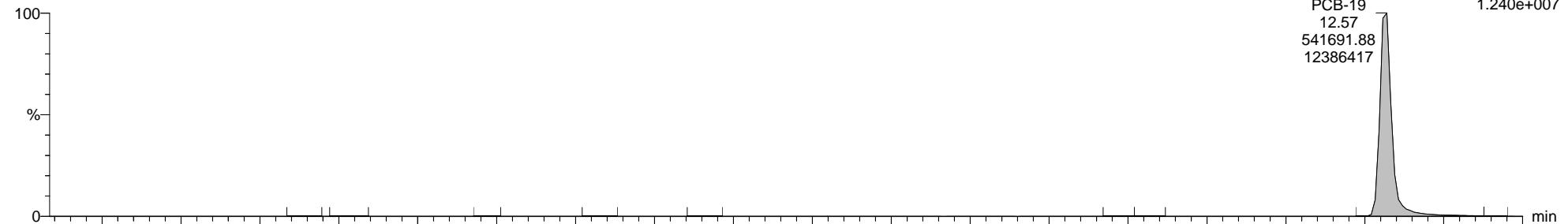
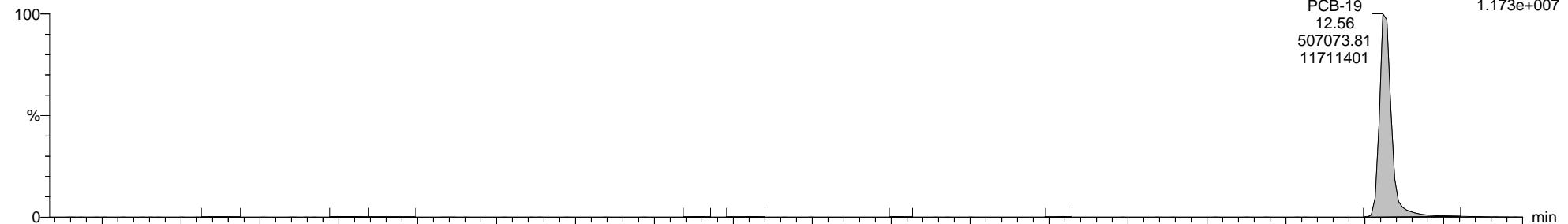
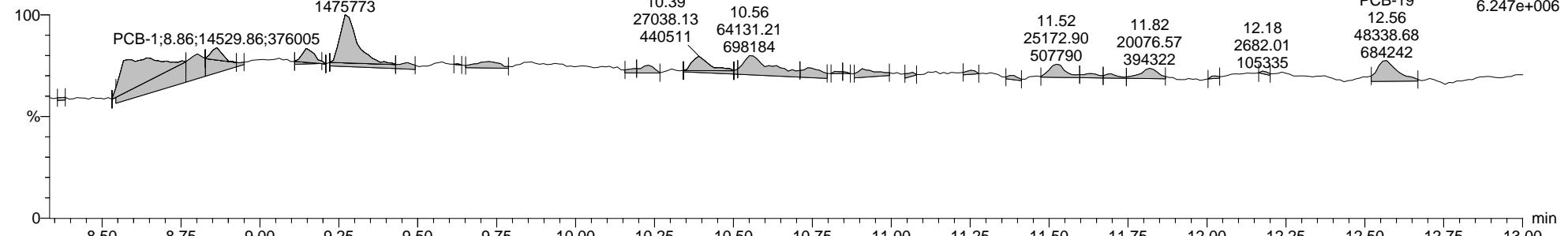
**Name: 5-151207C32, Date: 08-Dec-2015, Time: 11:35:53, ID: H5-15-CCV-575, Description: 1668A-CS#3-015, Vial: Tray1:3****13C-PCB-15**5-151207C32 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-575F2:Voltage SIR,EI+  
234.0406  
2.847e+0075-151207C32 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-575F2:Voltage SIR,EI+  
236.0376  
1.817e+0075-151207C32 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-575F2:Voltage SIR,EI+  
242.9856  
4.180e+006

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

Name: 5-151207C32, Date: 08-Dec-2015, Time: 11:35:53, ID: H5-15-CCV-575, Description: 1668A-CS#3-015, Vial: Tray1:3

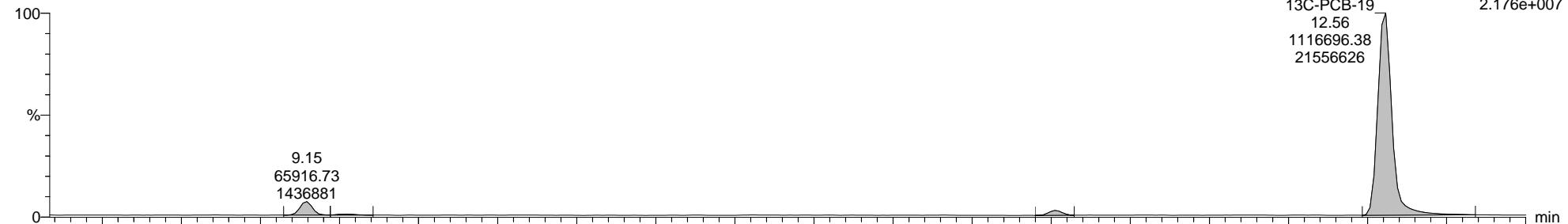
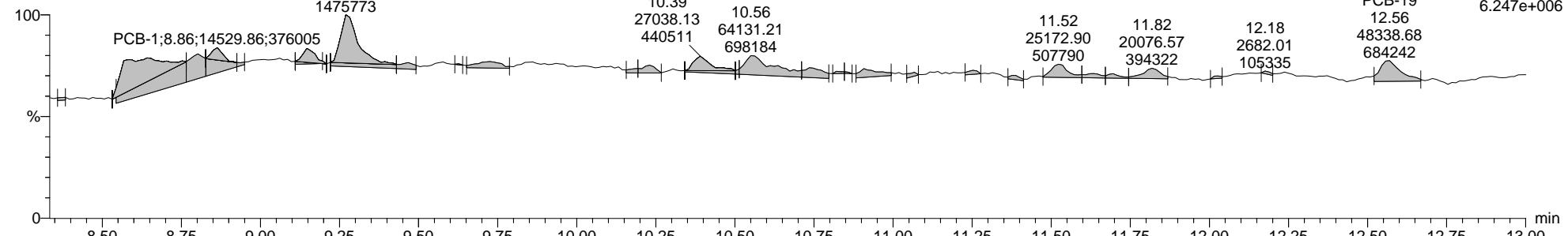
**PCB-19**5-151207C32  
1668A-CS#3-015 H5-15-CCV-5755-151207C32  
1668A-CS#3-015 H5-15-CCV-5755-151207C32 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-575

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

Name: 5-151207C32, Date: 08-Dec-2015, Time: 11:35:53, ID: H5-15-CCV-575, Description: 1668A-CS#3-015, Vial: Tray1:3

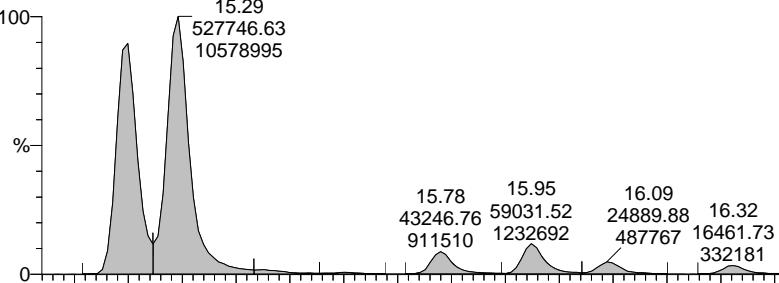
**13C-PCB-19**5-151207C32 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-5755-151207C32 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-5755-151207C32 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-575

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

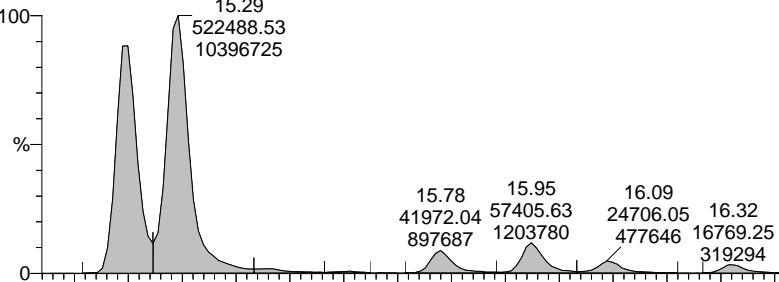
Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

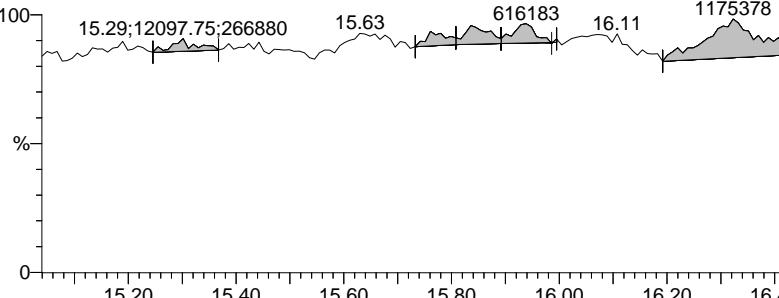
Name: 5-151207C32, Date: 08-Dec-2015, Time: 11:35:53, ID: H5-15-CCV-575, Description: 1668A-CS#3-015, Vial: Tray1:3

**PCB-37**5-151207C32  
1668A-CS#3-015 H5-15-CCV-575

F3:Voltage SIR,EI+  
PCB-37 18.18 255.9613  
506567.59 1.059e+007  
9074041

5-151207C32  
1668A-CS#3-015 H5-15-CCV-575

F3:Voltage SIR,EI+  
PCB-37 18.18 257.9584  
504235.34 1.041e+007  
8941614

5-151207C32  
1668A-CS#3-015 H5-15-CCV-575

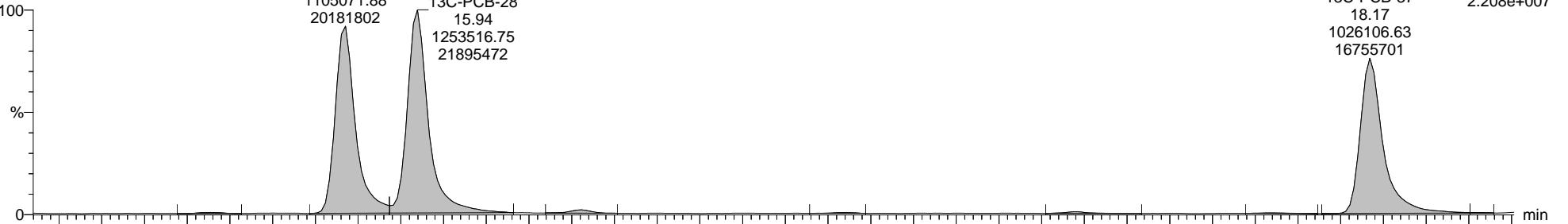
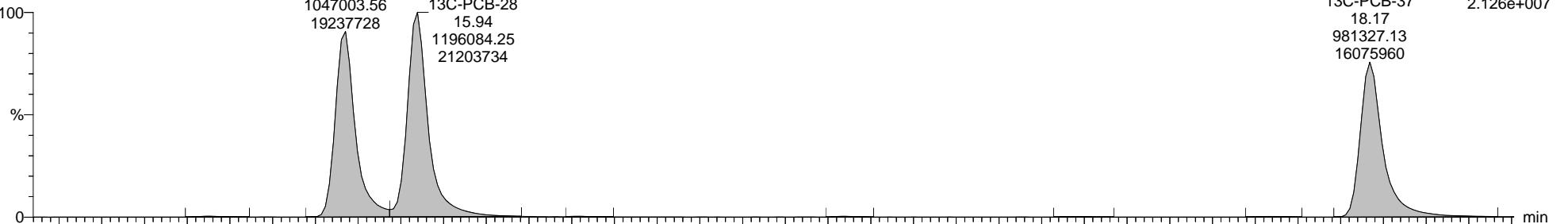
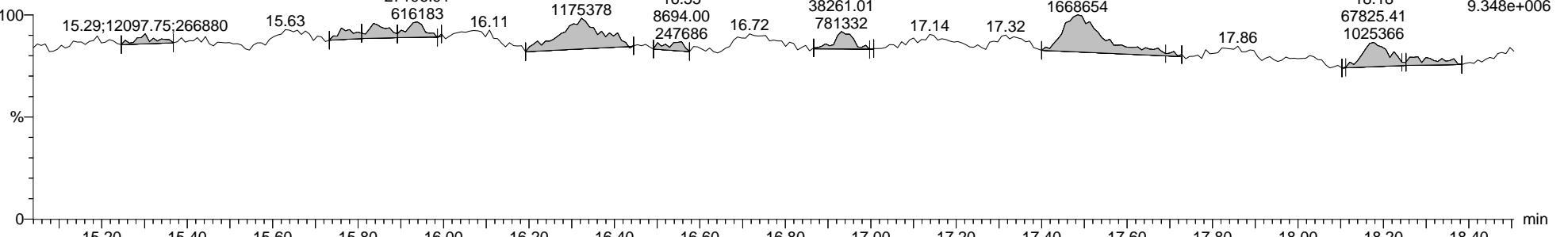
F3:Voltage SIR,EI+  
PCB-37 18.18 280.9825  
67825.41 9.348e+006  
1025366

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

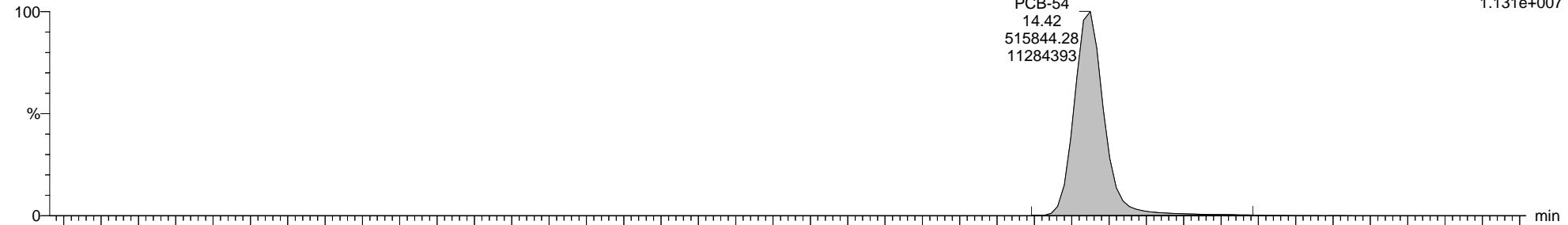
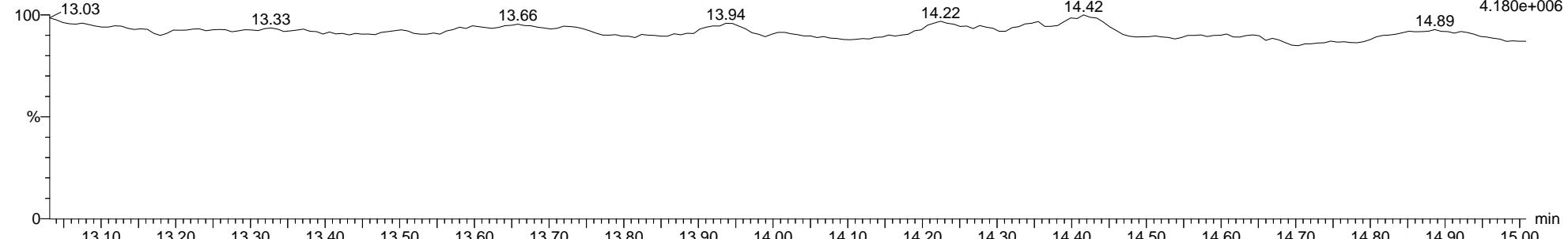
Name: 5-151207C32, Date: 08-Dec-2015, Time: 11:35:53, ID: H5-15-CCV-575, Description: 1668A-CS#3-015, Vial: Tray1:3

**13C-PCB-37**5-151207C32 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-57513C-PCB-31  
15.77  
1105071.88  
2018180213C-PCB-28  
15.94  
1253516.75  
21895472F3:Voltage SIR,EI+  
268.001613C-PCB-37  
18.17  
1026106.63  
167557015-151207C32 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-57513C-PCB-31  
15.77  
1047003.56  
1923772813C-PCB-28  
15.94  
1196084.25  
21203734F3:Voltage SIR,EI+  
269.998613C-PCB-37  
18.17  
981327.13  
160759605-151207C32  
1668A-CS#3-015 H5-15-CCV-57515.29;12097.75;266880  
15.63  
15.94  
27196.91  
616183  
16.1116.32  
136491.38  
1175378  
16.55  
8694.00  
247686  
16.7216.93  
38261.01  
781332  
17.14  
17.3217.48  
176178.31  
1668654  
17.86F3:Voltage SIR,EI+  
280.9825PCB-37  
18.18  
67825.41  
1025366

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

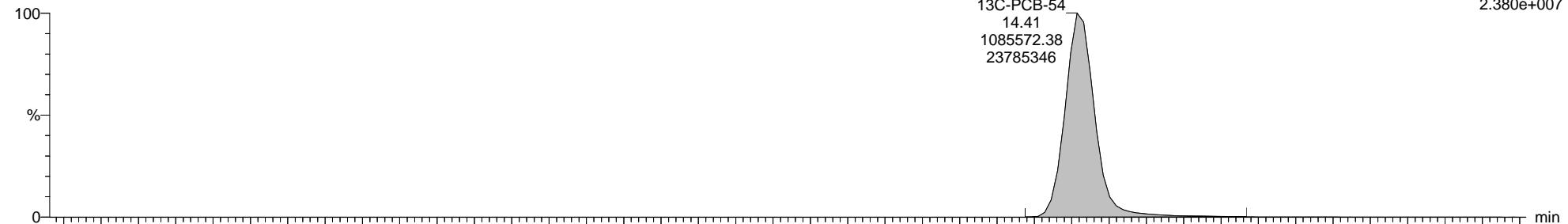
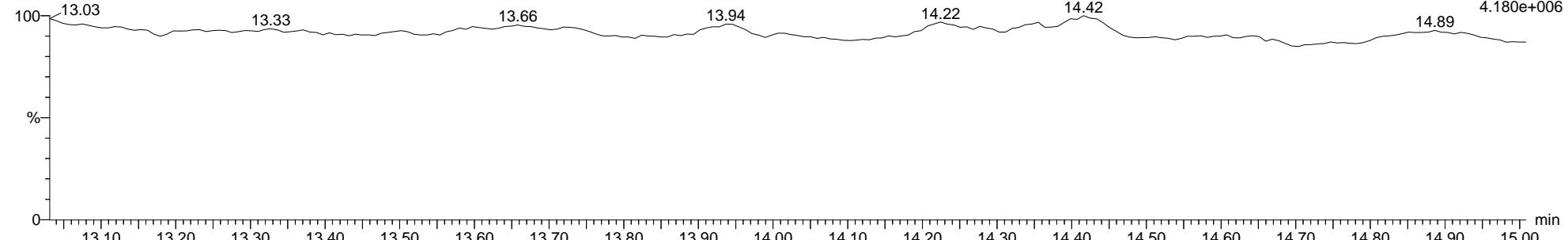
Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

**Name: 5-151207C32, Date: 08-Dec-2015, Time: 11:35:53, ID: H5-15-CCV-575, Description: 1668A-CS#3-015, Vial: Tray1:3****PCB-54**5-151207C32 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-5755-151207C32 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-5755-151207C32 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-575

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

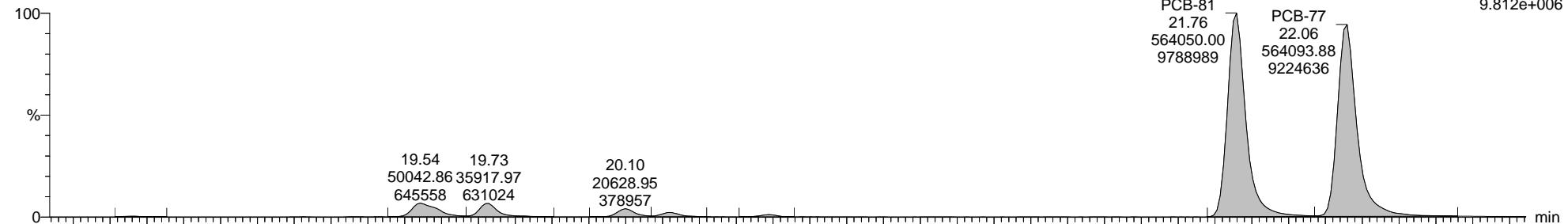
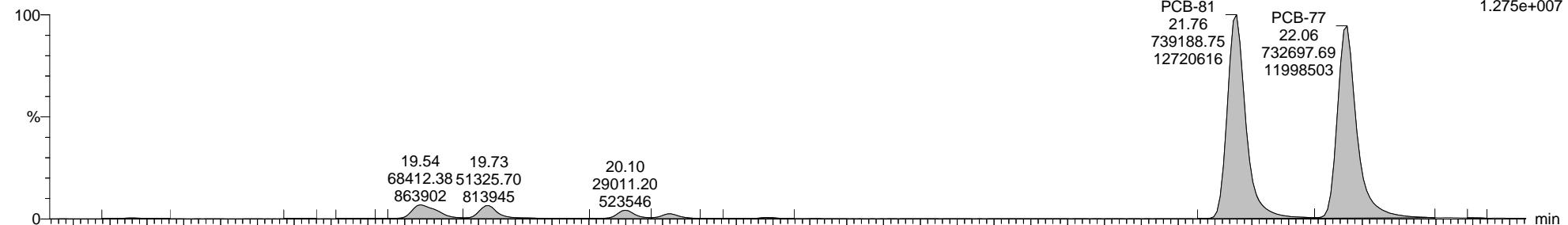
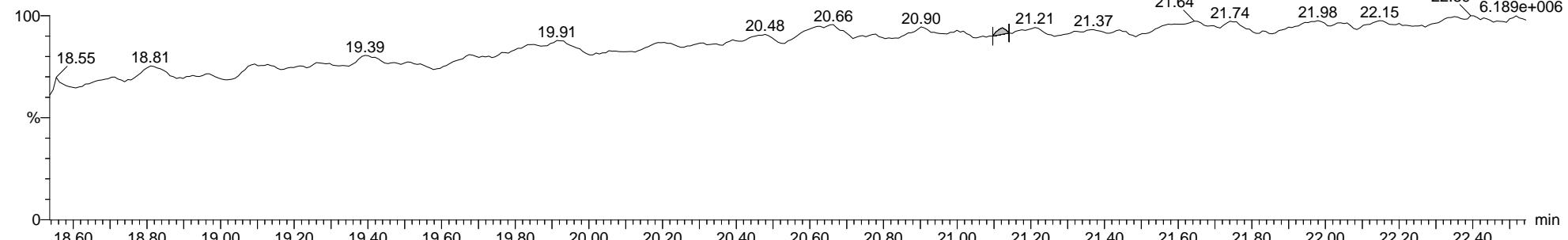
**Name: 5-151207C32, Date: 08-Dec-2015, Time: 11:35:53, ID: H5-15-CCV-575, Description: 1668A-CS#3-015, Vial: Tray1:3****13C-PCB-54**5-151207C32 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-5755-151207C32 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-5755-151207C32 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-575

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

Name: 5-151207C32, Date: 08-Dec-2015, Time: 11:35:53, ID: H5-15-CCV-575, Description: 1668A-CS#3-015, Vial: Tray1:3

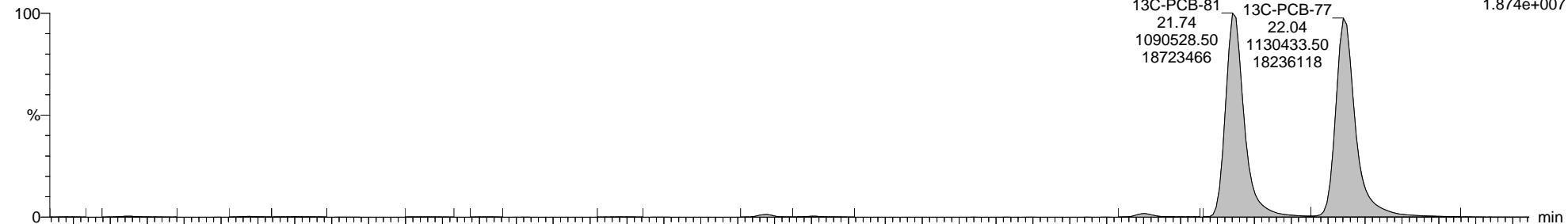
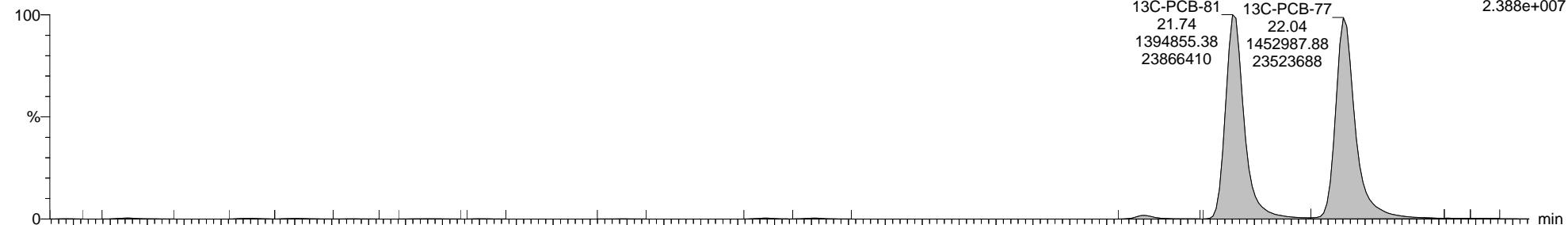
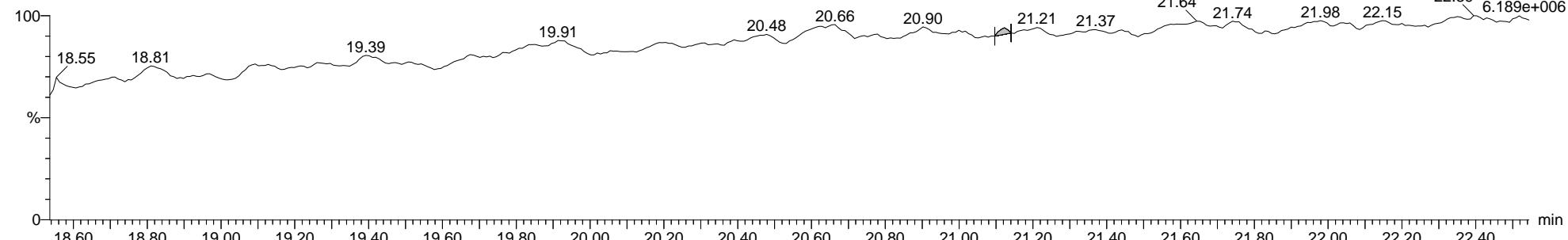
**PCB-81**5-151207C32 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-5755-151207C32 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-5755-151207C32 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-575

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

Name: 5-151207C32, Date: 08-Dec-2015, Time: 11:35:53, ID: H5-15-CCV-575, Description: 1668A-CS#3-015, Vial: Tray1:3

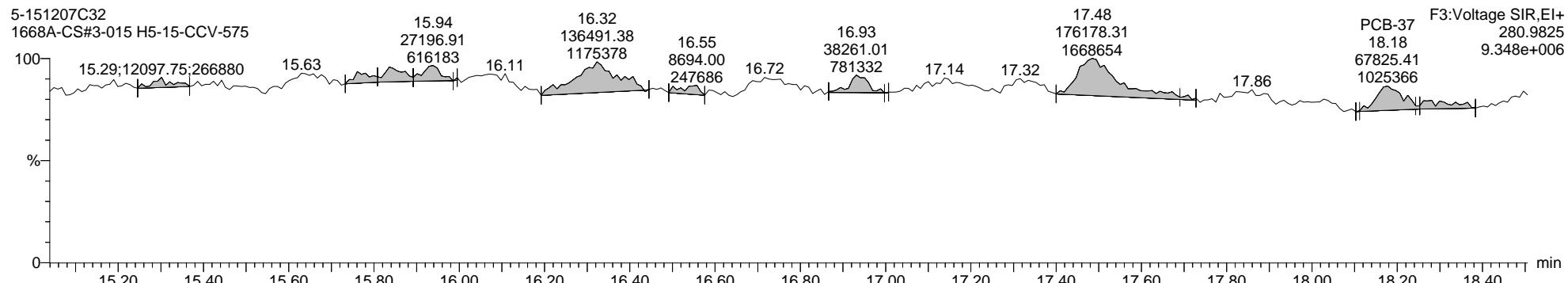
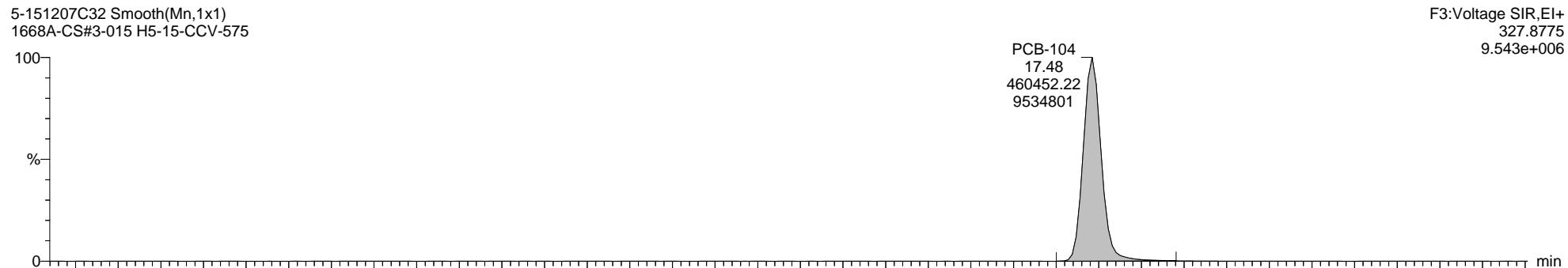
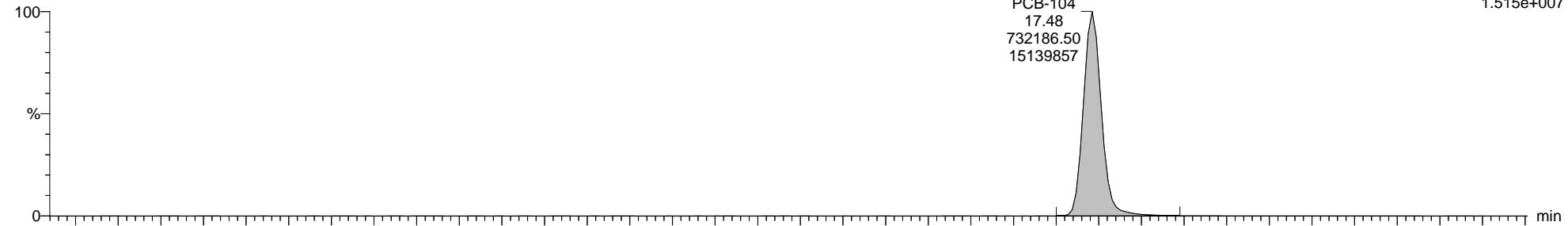
**13C-PCB-81**5-151207C32 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-5755-151207C32 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-5755-151207C32 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-575

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

Name: 5-151207C32, Date: 08-Dec-2015, Time: 11:35:53, ID: H5-15-CCV-575, Description: 1668A-CS#3-015, Vial: Tray1:3

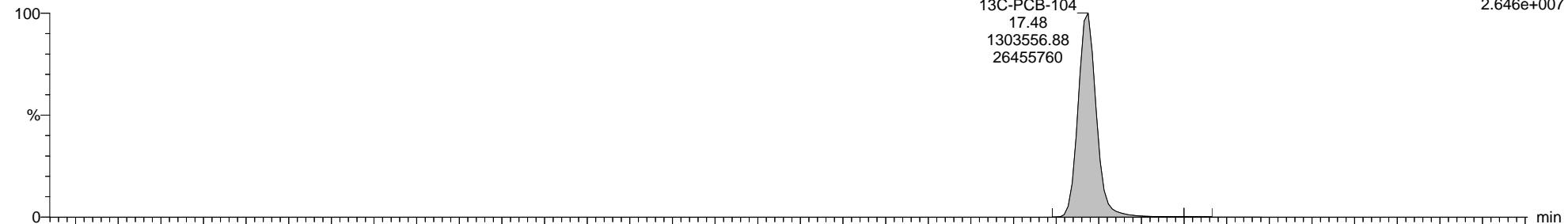
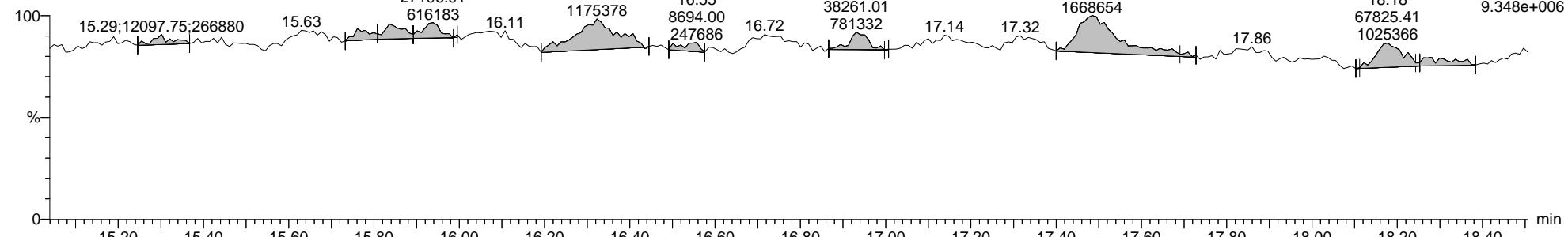
**PCB-104**5-151207C32 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-575

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

Name: 5-151207C32, Date: 08-Dec-2015, Time: 11:35:53, ID: H5-15-CCV-575, Description: 1668A-CS#3-015, Vial: Tray1:3

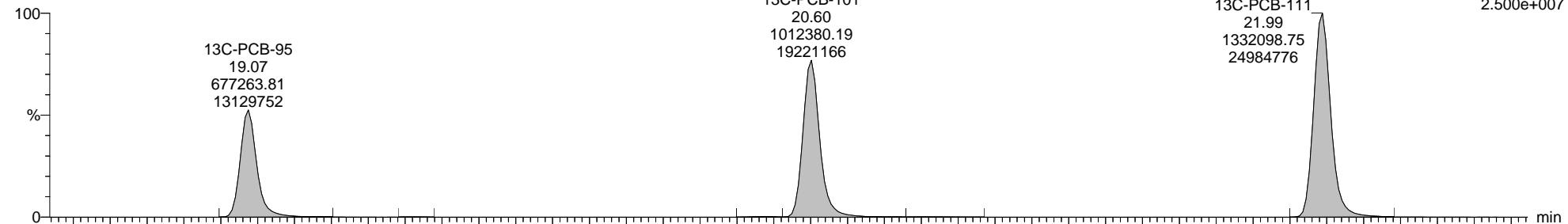
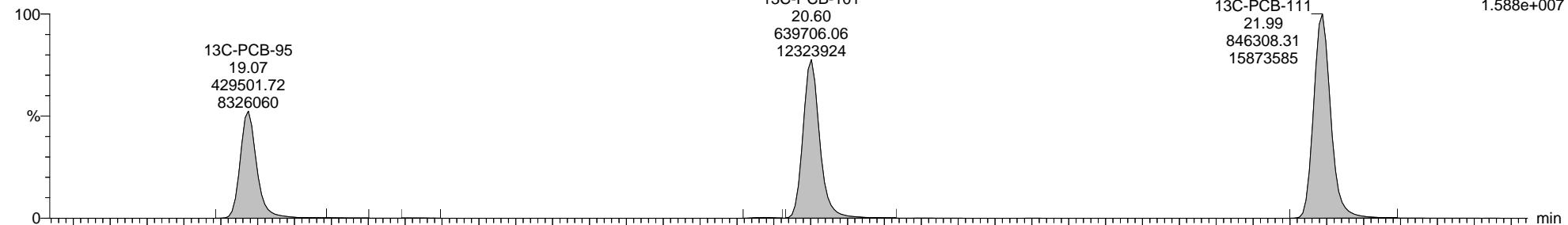
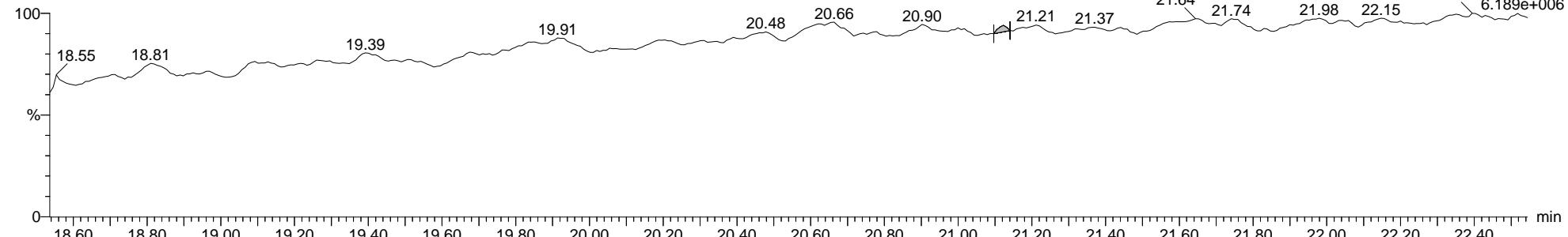
**13C-PCB-104**5-151207C32 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-5755-151207C32 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-5755-151207C32  
1668A-CS#3-015 H5-15-CCV-575

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

Name: 5-151207C32, Date: 08-Dec-2015, Time: 11:35:53, ID: H5-15-CCV-575, Description: 1668A-CS#3-015, Vial: Tray1:3

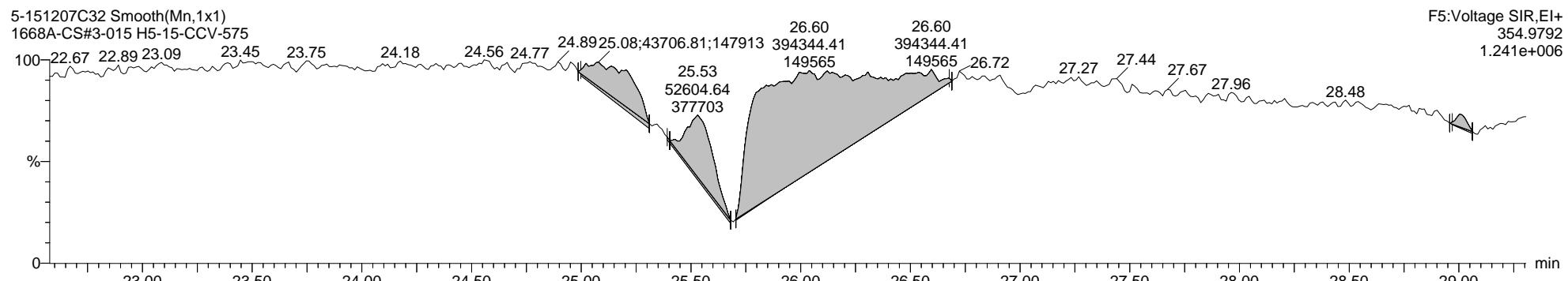
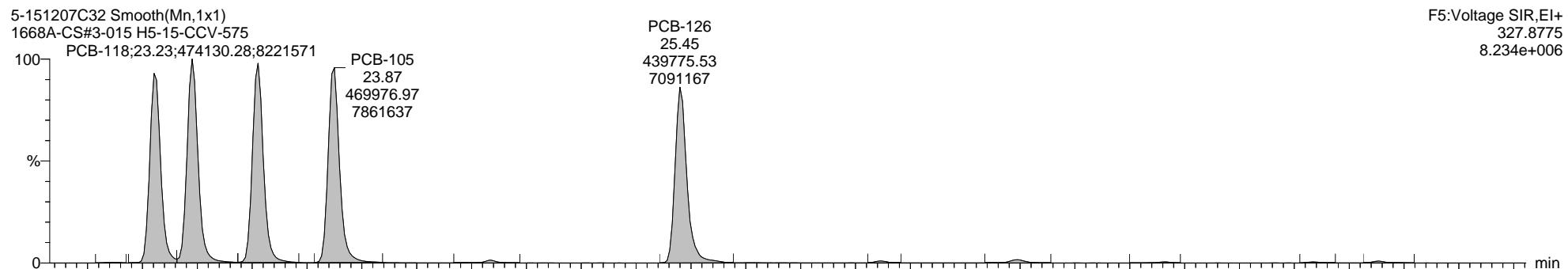
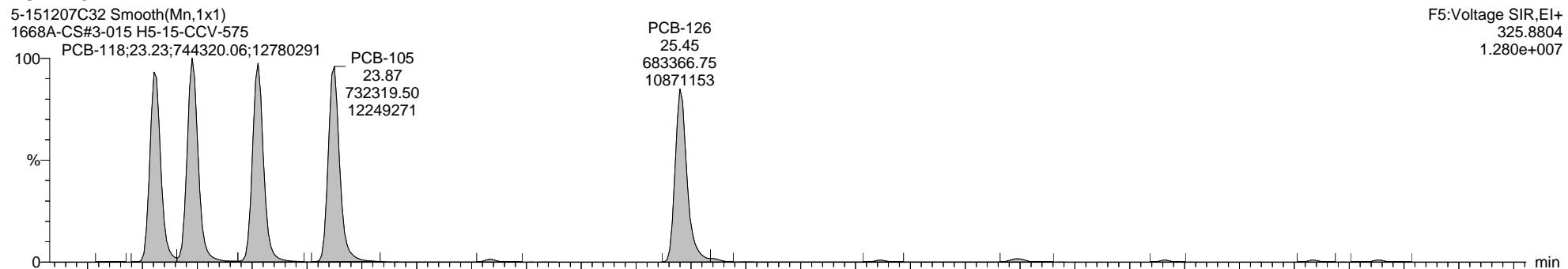
**13C-PCB-111**5-151207C32 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-5755-151207C32 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-5755-151207C32 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-575

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

Name: 5-151207C32, Date: 08-Dec-2015, Time: 11:35:53, ID: H5-15-CCV-575, Description: 1668A-CS#3-015, Vial: Tray1:3

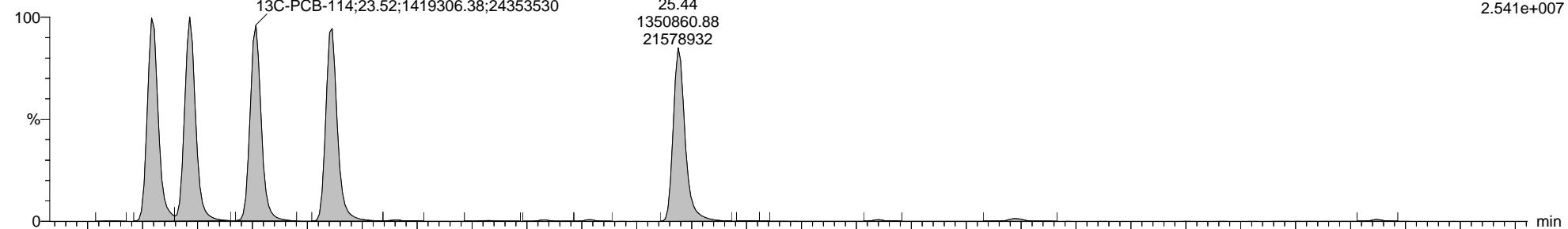
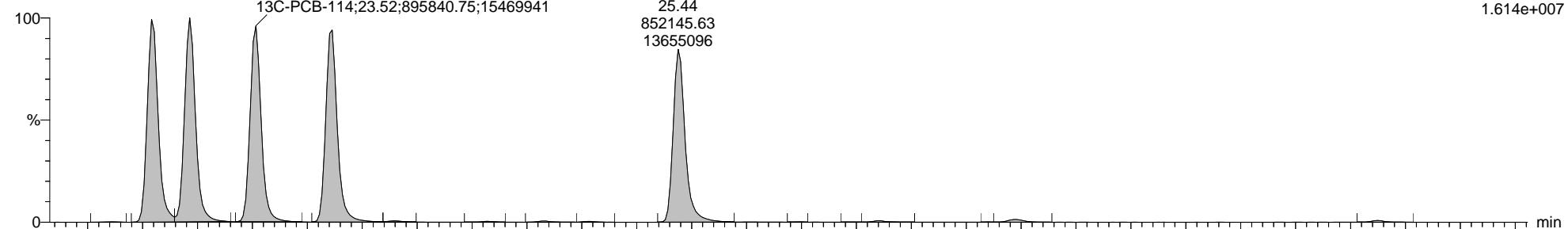
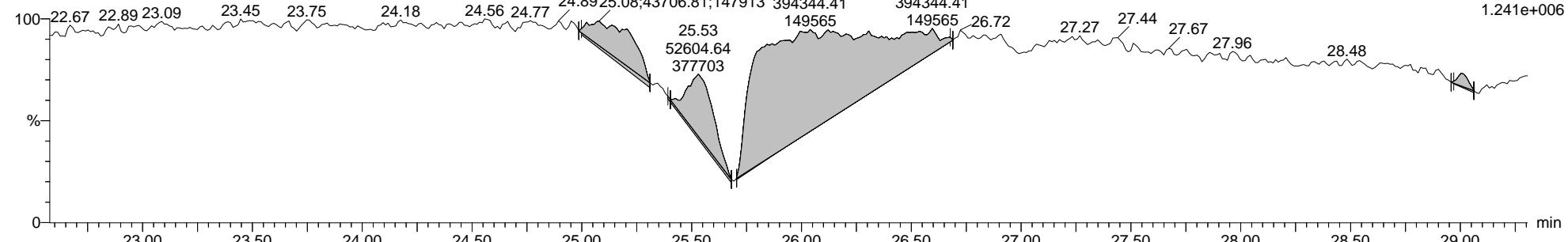
**PCB-123**

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

Name: 5-151207C32, Date: 08-Dec-2015, Time: 11:35:53, ID: H5-15-CCV-575, Description: 1668A-CS#3-015, Vial: Tray1:3

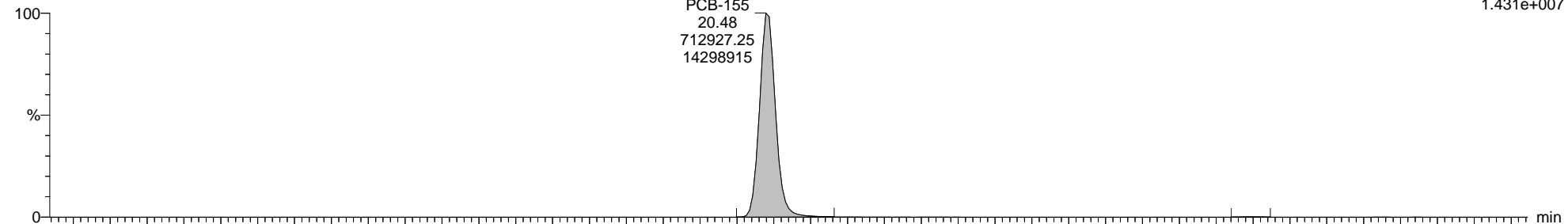
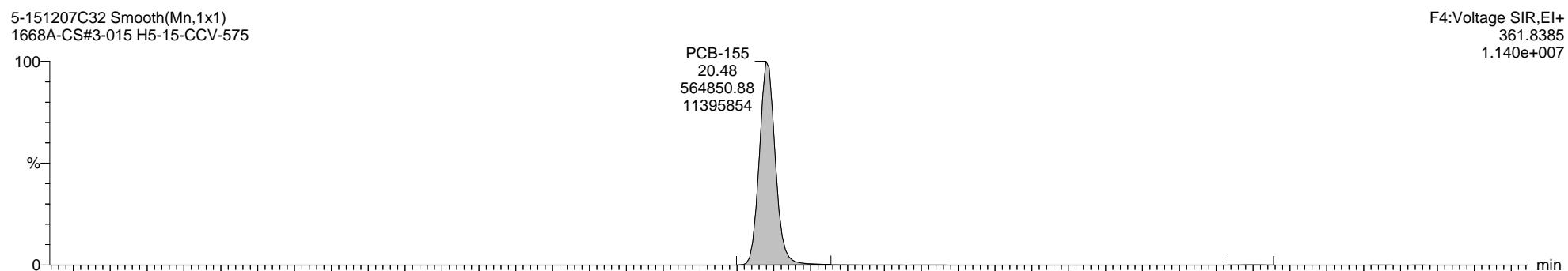
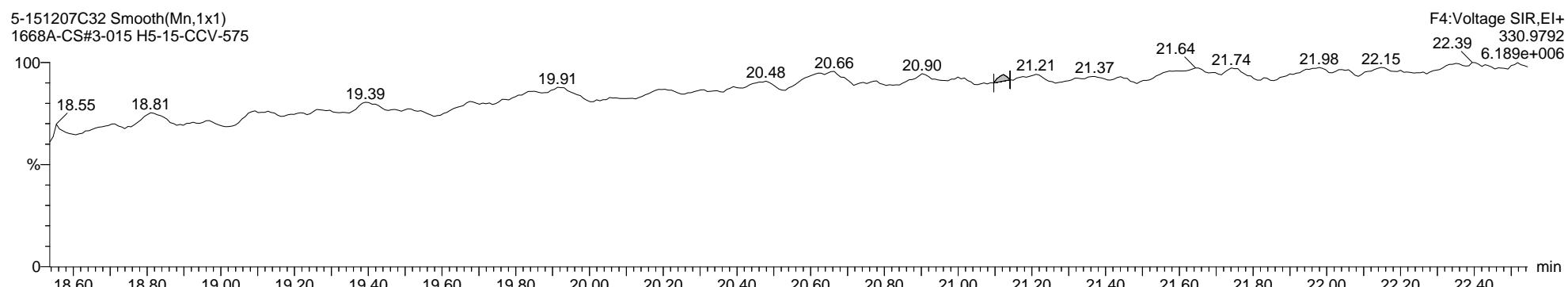
**13C-PCB-123**5-151207C32 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-5755-151207C32 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-5755-151207C32 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-575

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

Name: 5-151207C32, Date: 08-Dec-2015, Time: 11:35:53, ID: H5-15-CCV-575, Description: 1668A-CS#3-015, Vial: Tray1:3

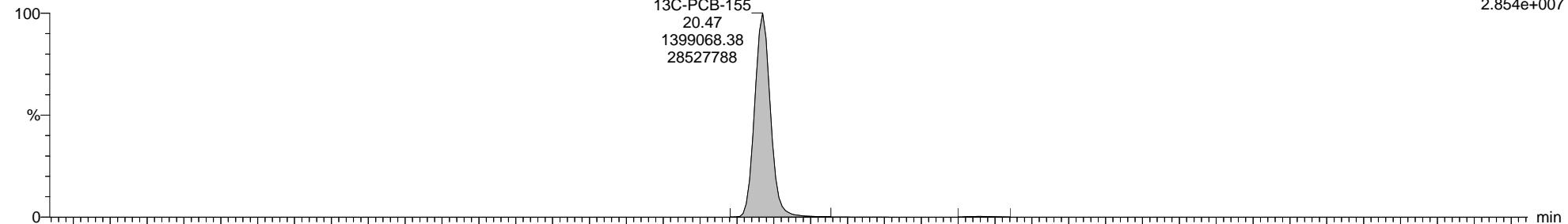
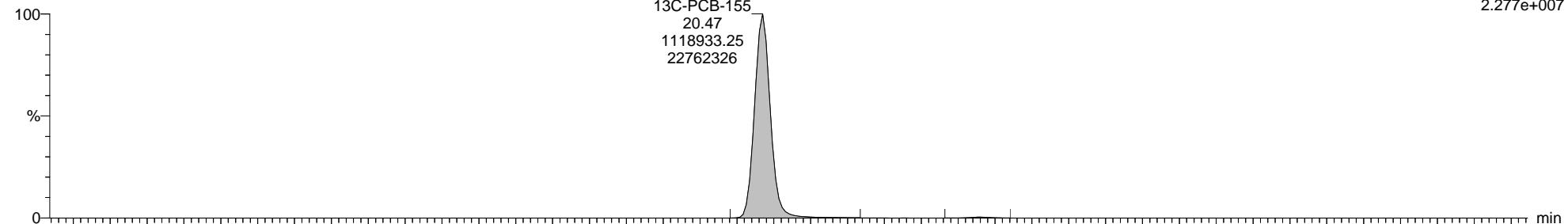
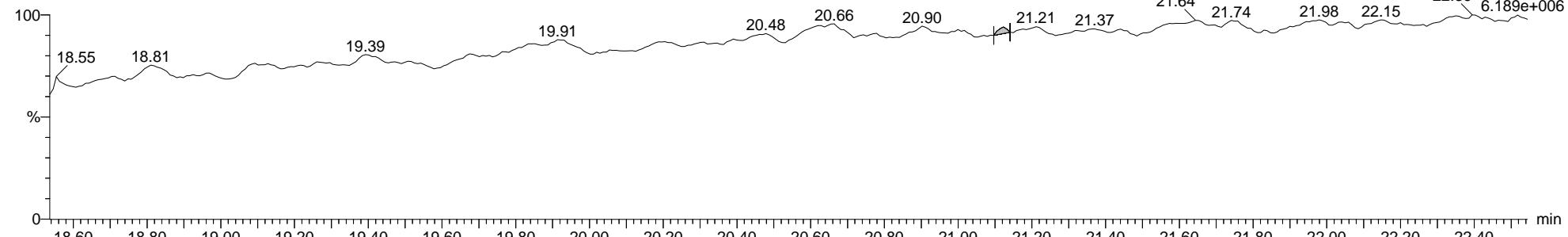
**PCB-155**5-151207C32 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-5755-151207C32 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-5755-151207C32 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-575

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

Name: 5-151207C32, Date: 08-Dec-2015, Time: 11:35:53, ID: H5-15-CCV-575, Description: 1668A-CS#3-015, Vial: Tray1:3

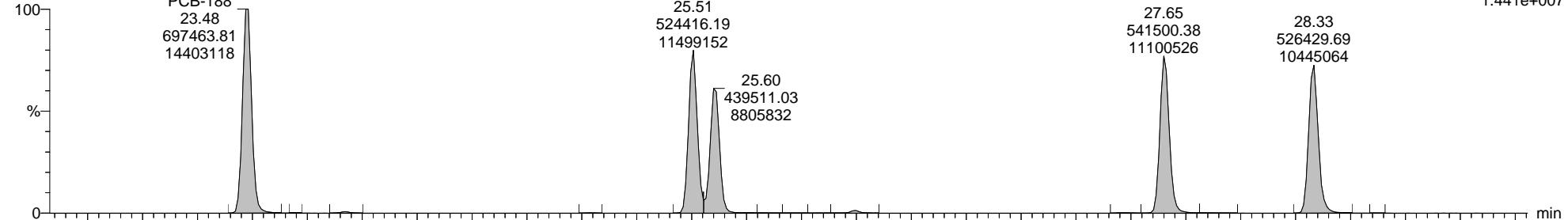
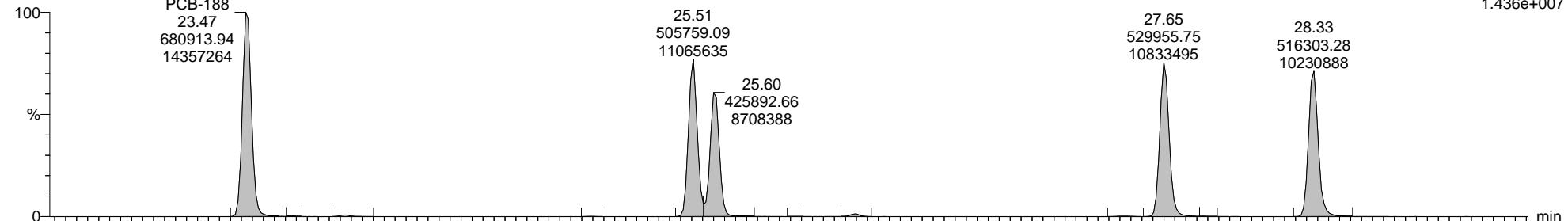
**13C-PCB-155**5-151207C32 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-5755-151207C32 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-575F4:Voltage SIR,EI+  
373.8789  
2.277e+0075-151207C32 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-575F4:Voltage SIR,EI+  
330.9792  
22.39  
6.189e+006

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

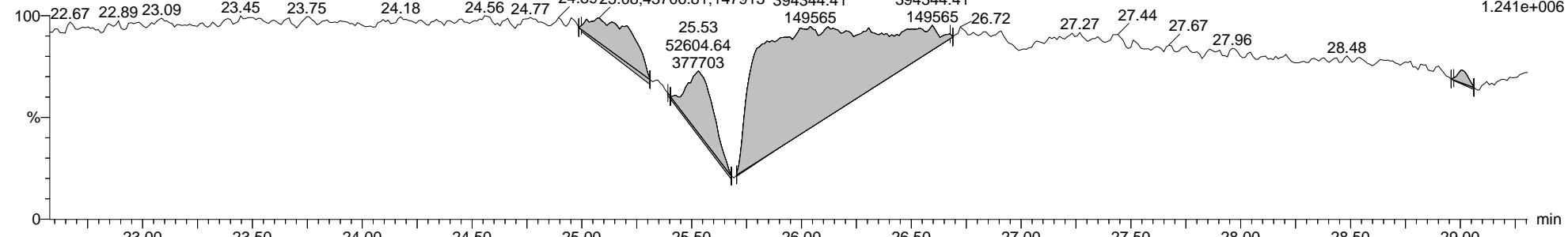
Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

Name: 5-151207C32, Date: 08-Dec-2015, Time: 11:35:53, ID: H5-15-CCV-575, Description: 1668A-CS#3-015, Vial: Tray1:3

**PCB-188**5-151207C32  
1668A-CS#3-015 H5-15-CCV-575  
PCB-1885-151207C32  
1668A-CS#3-015 H5-15-CCV-575  
PCB-188

5-151207C32 Smooth(Mn,1x1)

1668A-CS#3-015 H5-15-CCV-575



Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

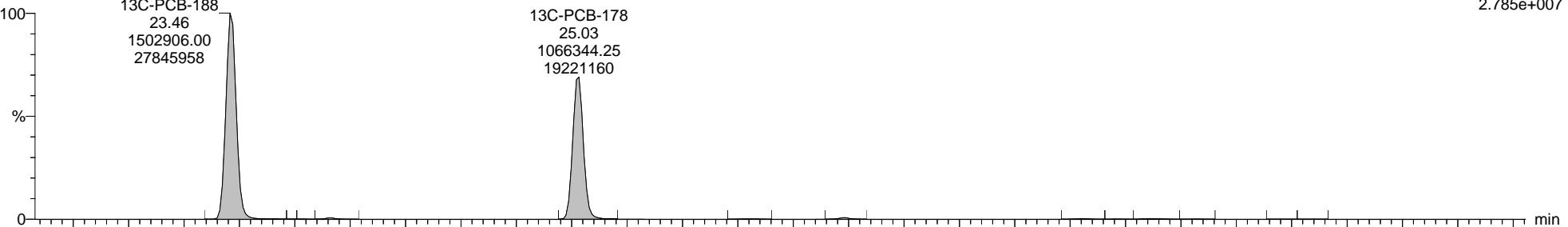
Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

Name: 5-151207C32, Date: 08-Dec-2015, Time: 11:35:53, ID: H5-15-CCV-575, Description: 1668A-CS#3-015, Vial: Tray1:3

**13C-PCB-188**

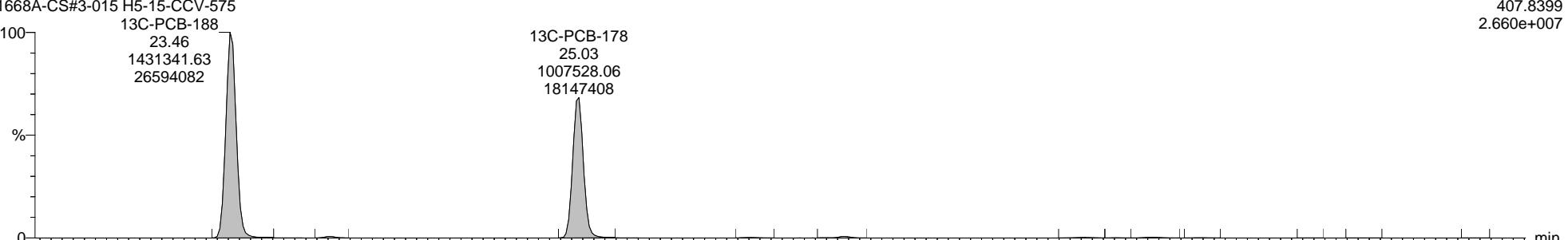
5-151207C32 Smooth(Mn,1x1)

1668A-CS#3-015 H5-15-CCV-575

13C-PCB-188  
23.46  
1502906.00  
2784595813C-PCB-178  
25.03  
1066344.25  
19221160F5:Voltage SIR,EI+  
405.8428  
2.785e+007

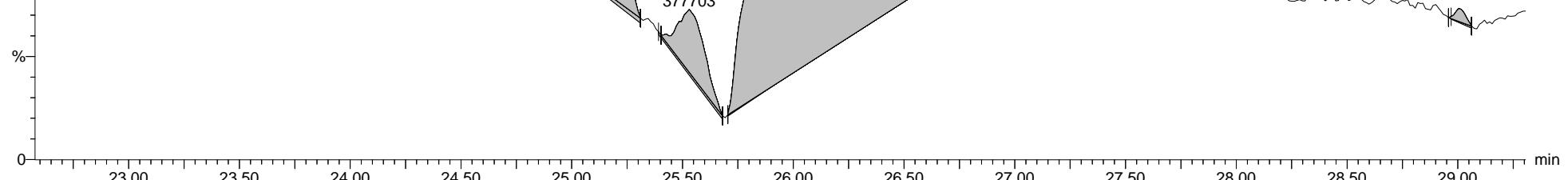
5-151207C32 Smooth(Mn,1x1)

1668A-CS#3-015 H5-15-CCV-575

13C-PCB-188  
23.46  
1431341.63  
2659408213C-PCB-178  
25.03  
1007528.06  
18147408F5:Voltage SIR,EI+  
407.8399  
2.660e+007

5-151207C32 Smooth(Mn,1x1)

1668A-CS#3-015 H5-15-CCV-575

22.67 22.89 23.09 23.45 23.75 24.18 24.56 24.77 24.89 25.08 43706.81;147913  
25.53 52604.64 37770326.60 394344.41 149565  
26.60 394344.41 149565  
26.72F5:Voltage SIR,EI+  
354.9792  
1.241e+006

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

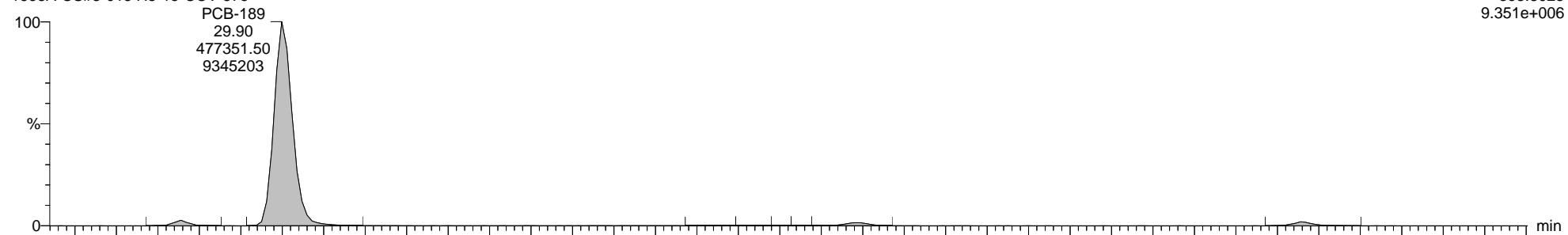
Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

**Name: 5-151207C32, Date: 08-Dec-2015, Time: 11:35:53, ID: H5-15-CCV-575, Description: 1668A-CS#3-015, Vial: Tray1:3****PCB-189**

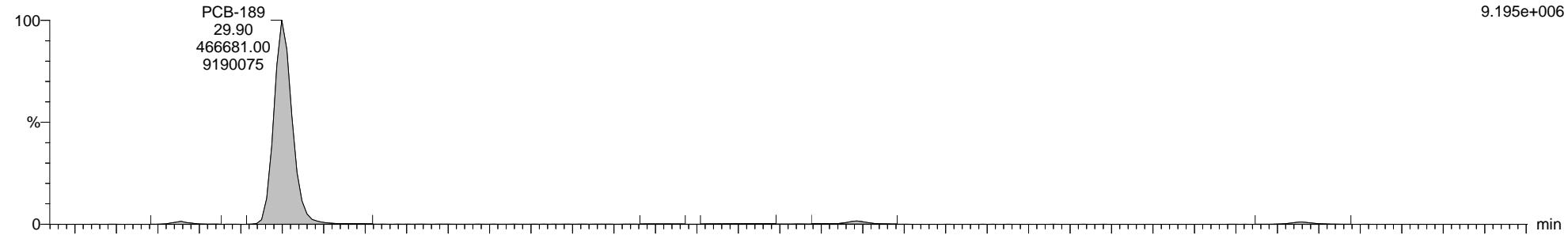
5-151207C32

1668A-CS#3-015 H5-15-CCV-575



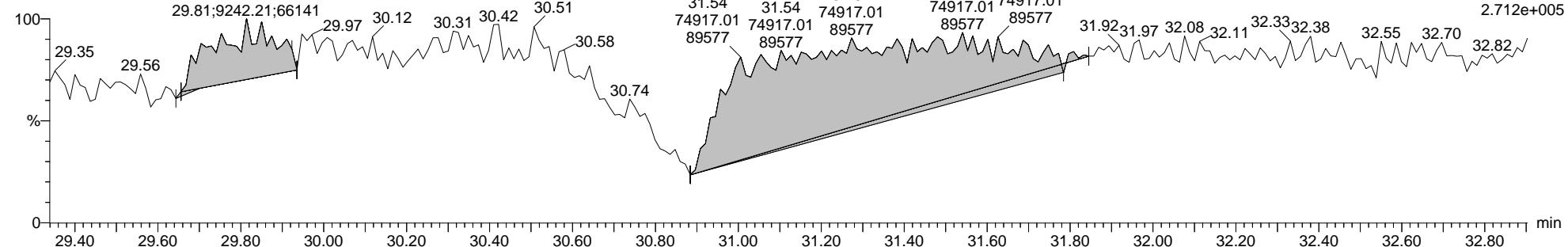
5-151207C32

1668A-CS#3-015 H5-15-CCV-575



5-151207C32

1668A-CS#3-015 H5-15-CCV-575



Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

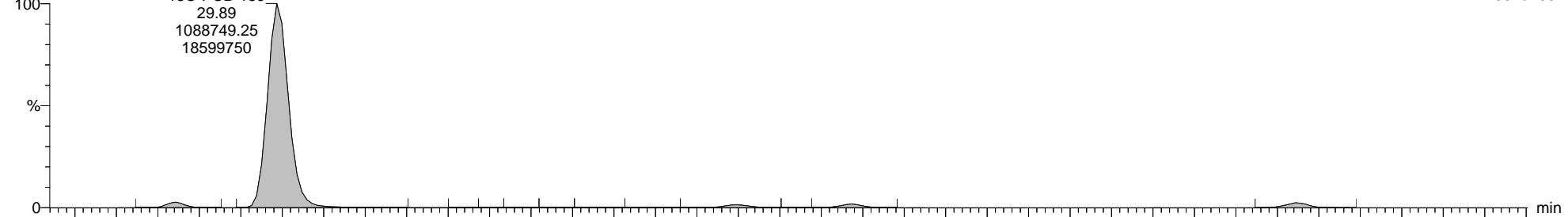
Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

**Name: 5-151207C32, Date: 08-Dec-2015, Time: 11:35:53, ID: H5-15-CCV-575, Description: 1668A-CS#3-015, Vial: Tray1:3****13C-PCB-189**

5-151207C32 Smooth(Mn,1x1)

1668A-CS#3-015 H5-15-CCV-575

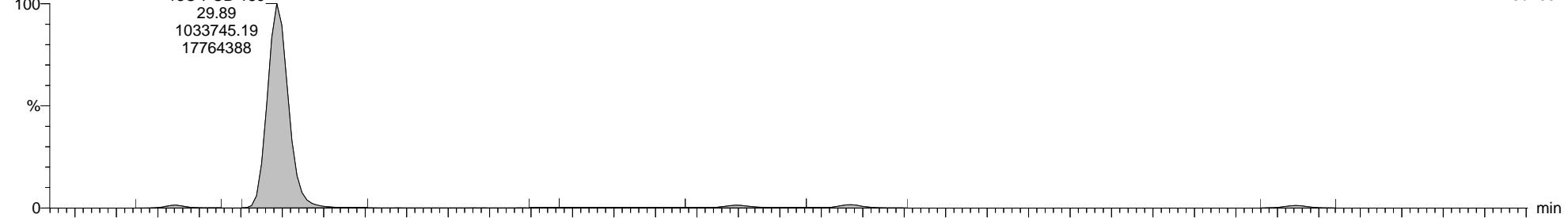
13C-PCB-189



5-151207C32 Smooth(Mn,1x1)

1668A-CS#3-015 H5-15-CCV-575

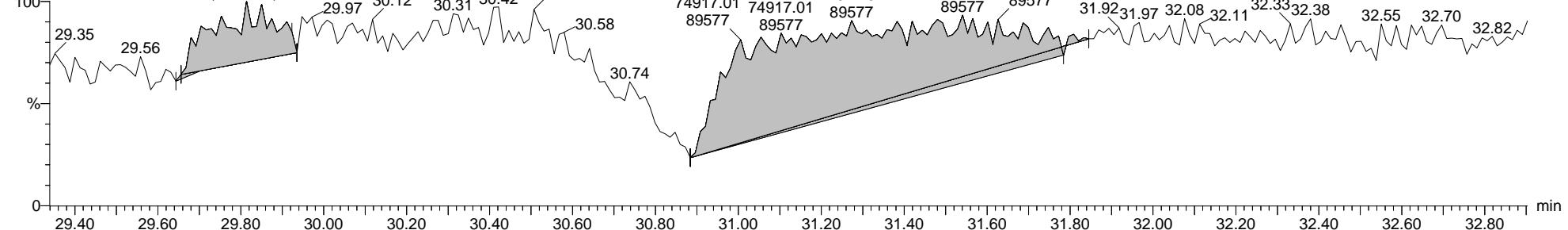
13C-PCB-189



5-151207C32

1668A-CS#3-015 H5-15-CCV-575

29.81;9242.21;66141

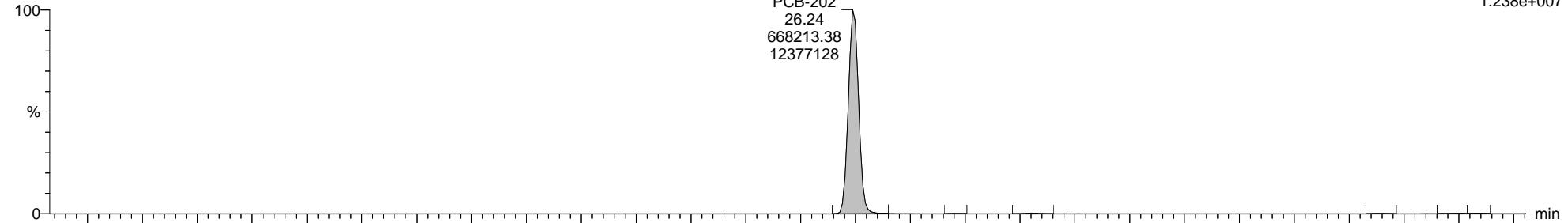
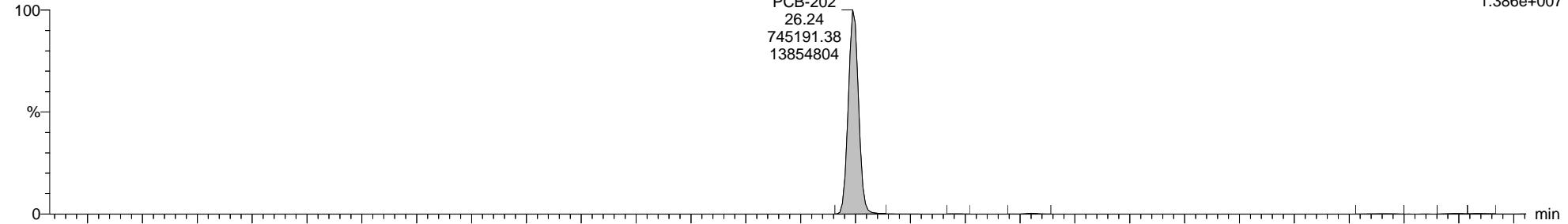
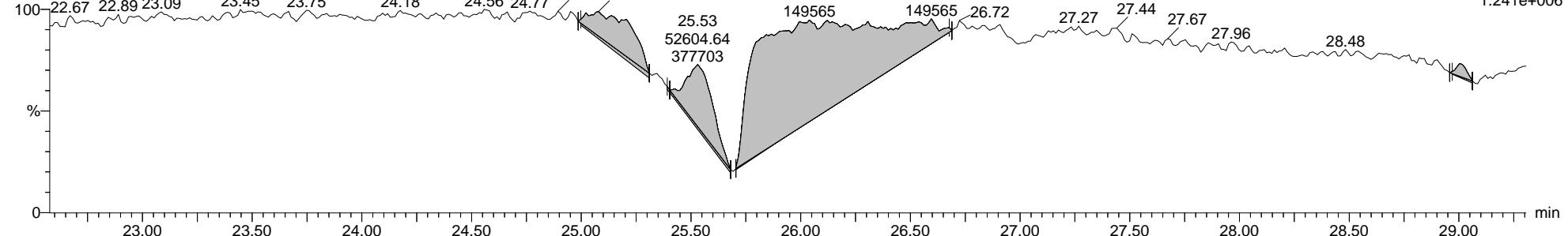


Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

Name: 5-151207C32, Date: 08-Dec-2015, Time: 11:35:53, ID: H5-15-CCV-575, Description: 1668A-CS#3-015, Vial: Tray1:3

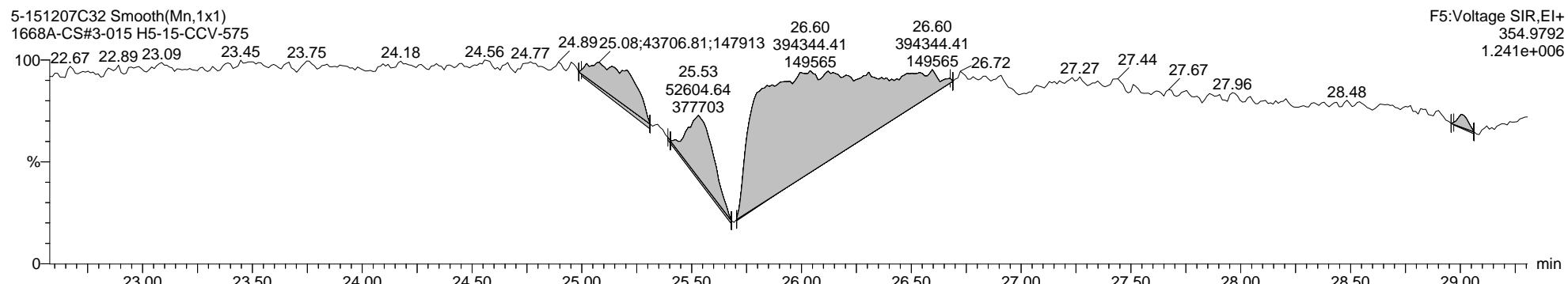
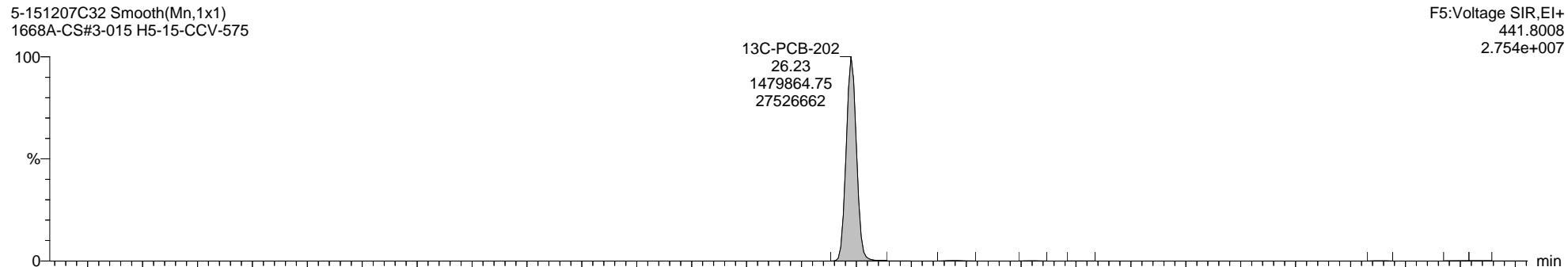
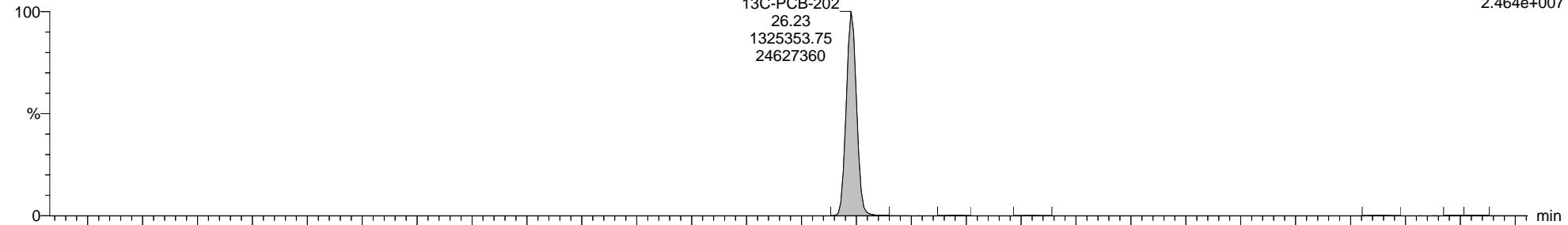
**PCB-202**5-151207C32 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-575F5:Voltage SIR,EI+  
427.7635  
1.238e+0075-151207C32 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-575F5:Voltage SIR,EI+  
429.7606  
1.386e+0075-151207C32 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-575F5:Voltage SIR,EI+  
354.9792  
1.241e+006

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

Name: 5-151207C32, Date: 08-Dec-2015, Time: 11:35:53, ID: H5-15-CCV-575, Description: 1668A-CS#3-015, Vial: Tray1:3

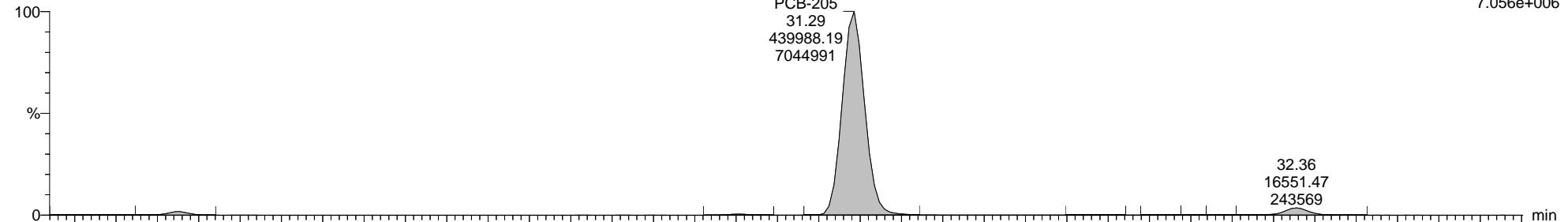
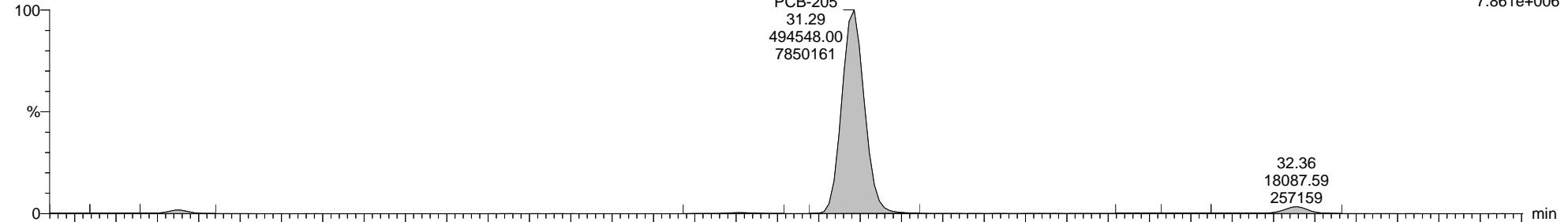
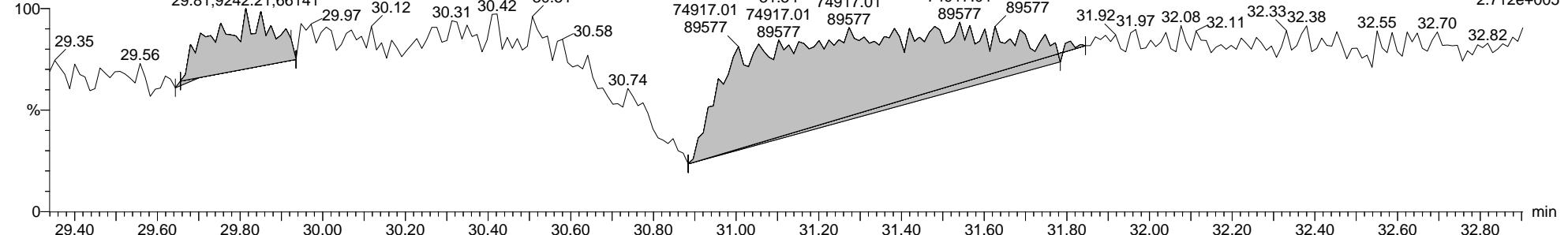
**13C-PCB-202**5-151207C32 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-575F5:Voltage SIR,EI+  
439.8038  
2.464e+007

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

Name: 5-151207C32, Date: 08-Dec-2015, Time: 11:35:53, ID: H5-15-CCV-575, Description: 1668A-CS#3-015, Vial: Tray1:3

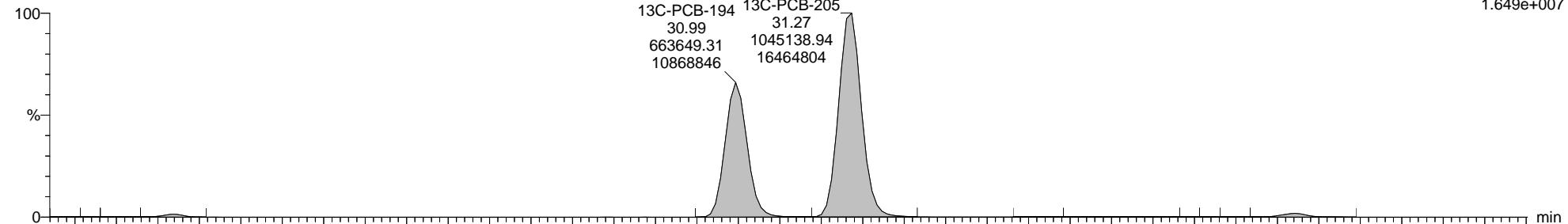
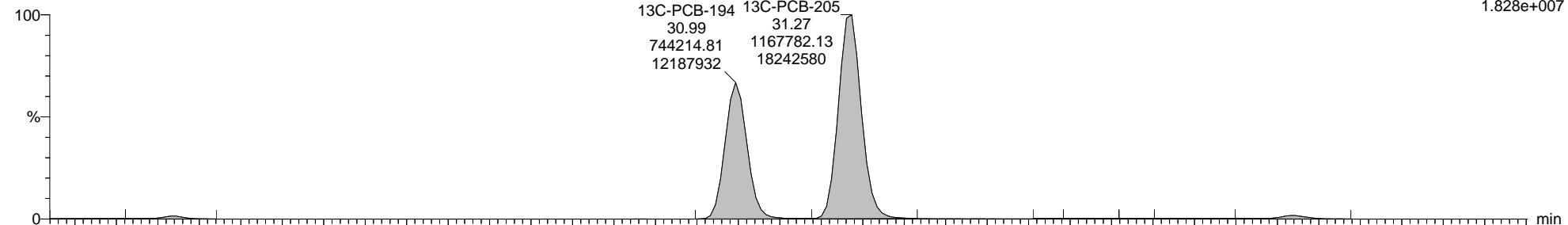
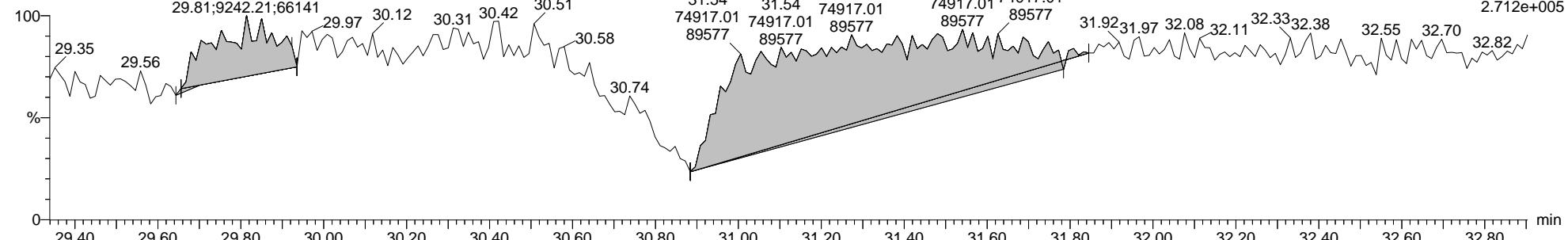
**PCB-205**5-151207C32 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-575F6:Voltage SIR,EI+  
427.7635  
7.056e+0065-151207C32 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-575F6:Voltage SIR,EI+  
429.7606  
7.861e+0065-151207C32  
1668A-CS#3-015 H5-15-CCV-575F6:Voltage SIR,EI+  
454.9728  
2.712e+005

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

Name: 5-151207C32, Date: 08-Dec-2015, Time: 11:35:53, ID: H5-15-CCV-575, Description: 1668A-CS#3-015, Vial: Tray1:3

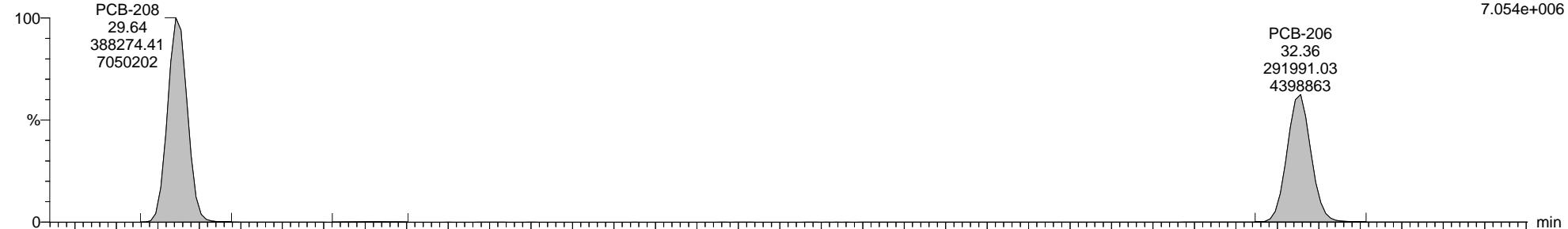
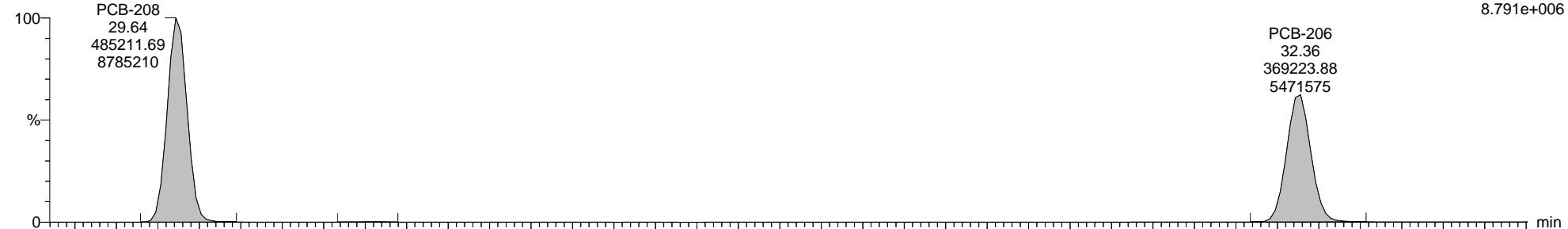
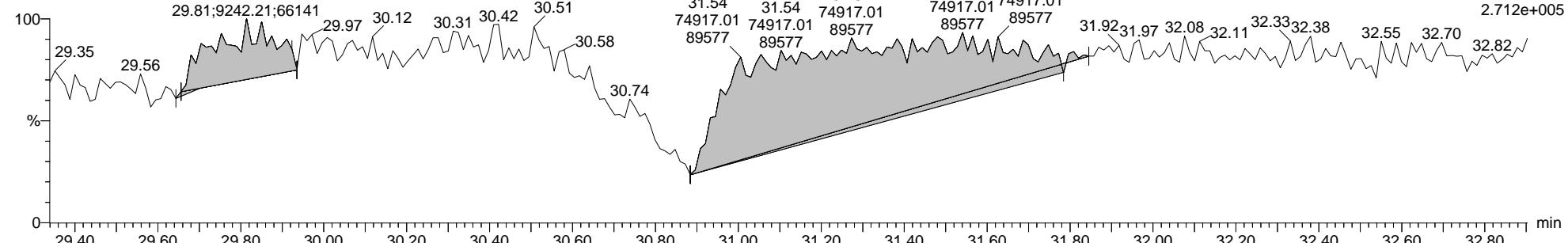
**13C-PCB-205**5-151207C32 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-5755-151207C32 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-5755-151207C32  
1668A-CS#3-015 H5-15-CCV-575

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

Name: 5-151207C32, Date: 08-Dec-2015, Time: 11:35:53, ID: H5-15-CCV-575, Description: 1668A-CS#3-015, Vial: Tray1:3

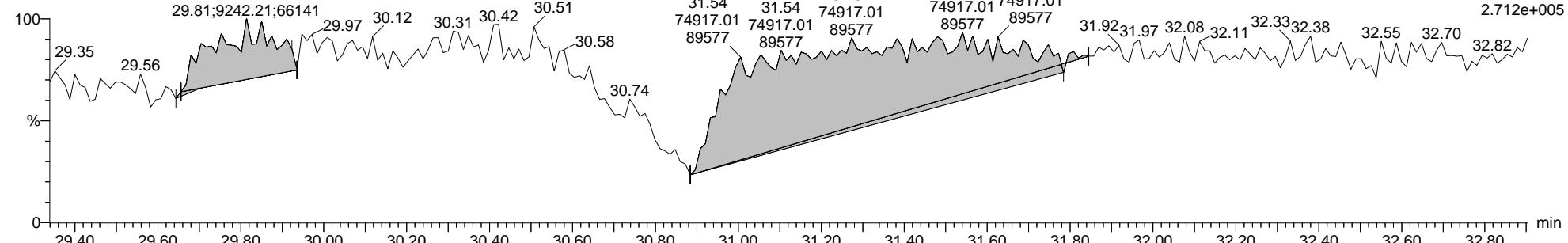
**PCB-208**5-151207C32 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-5755-151207C32 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-5755-151207C32  
1668A-CS#3-015 H5-15-CCV-575

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

Name: 5-151207C32, Date: 08-Dec-2015, Time: 11:35:53, ID: H5-15-CCV-575, Description: 1668A-CS#3-015, Vial: Tray1:3

**13C-PCB-208**5-151207C32 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-5755-151207C32 Smooth(Mn,1x1)  
1668A-CS#3-015 H5-15-CCV-5755-151207C32  
1668A-CS#3-015 H5-15-CCV-575

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

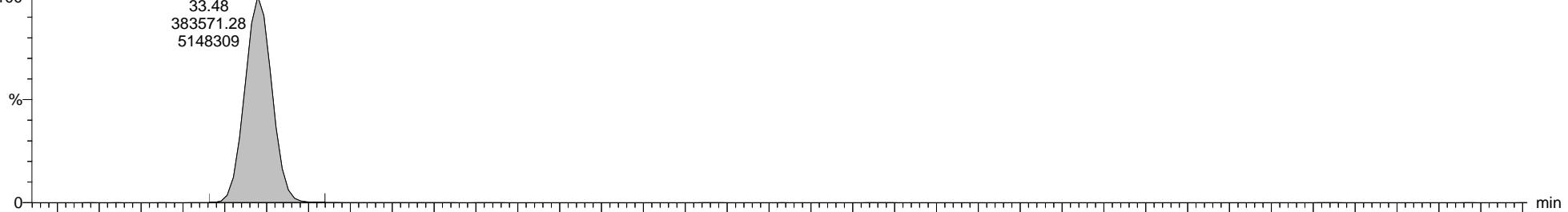
Name: 5-151207C32, Date: 08-Dec-2015, Time: 11:35:53, ID: H5-15-CCV-575, Description: 1668A-CS#3-015, Vial: Tray1:3

**PCB-209**

5-151207C32 Smooth(Mn,1x1)

1668A-CS#3-015 H5-15-CCV-575

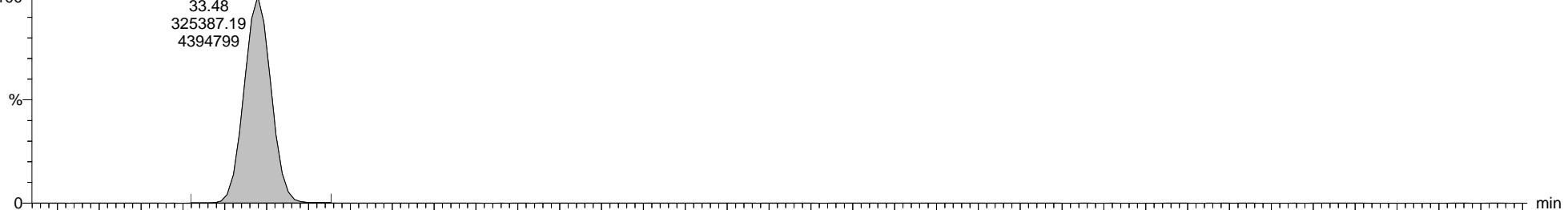
PCB-209



5-151207C32 Smooth(Mn,1x1)

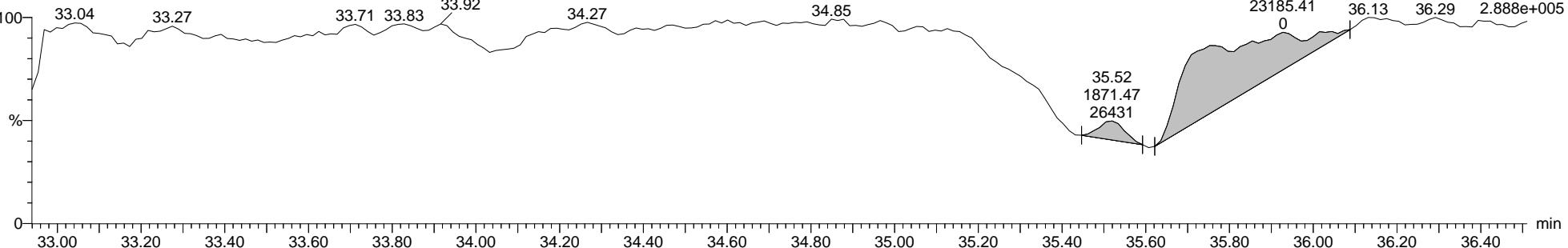
1668A-CS#3-015 H5-15-CCV-575

PCB-209



5-151207C32 Smooth(Mn,1x1)

1668A-CS#3-015 H5-15-CCV-575



Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

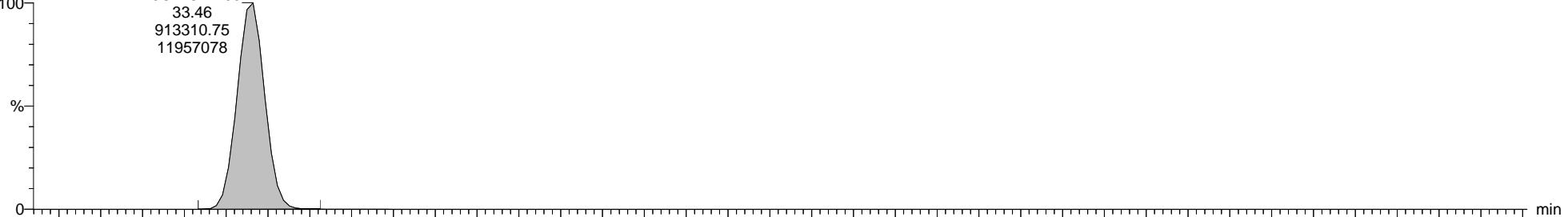
Name: 5-151207C32, Date: 08-Dec-2015, Time: 11:35:53, ID: H5-15-CCV-575, Description: 1668A-CS#3-015, Vial: Tray1:3

**13C-PCB-209**

5-151207C32 Smooth(Mn,1x1)

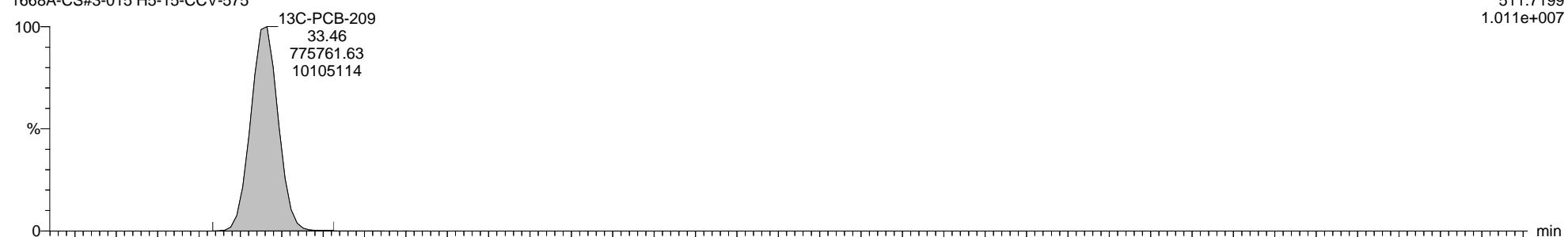
1668A-CS#3-015 H5-15-CCV-575

13C-PCB-209



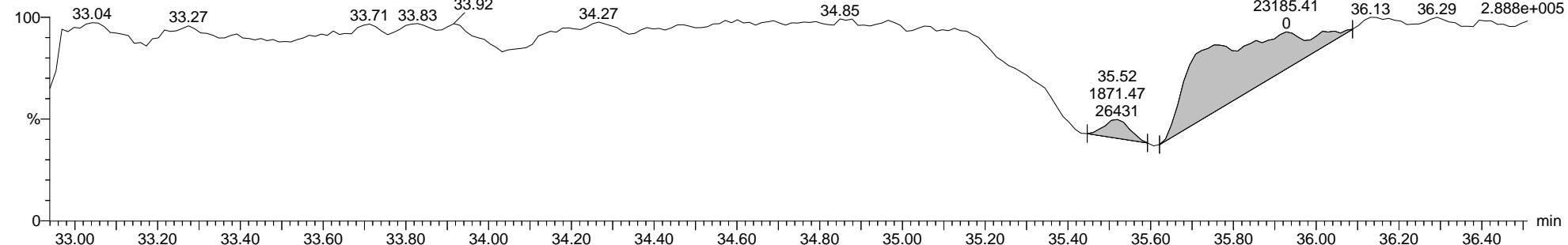
5-151207C32 Smooth(Mn,1x1)

1668A-CS#3-015 H5-15-CCV-575

13C-PCB-209  
33.46  
775761.63  
10105114

5-151207C32 Smooth(Mn,1x1)

1668A-CS#3-015 H5-15-CCV-575

F7:Voltage SIR, EI+  
516.9697  
2.888e+005

**Quantify Audit Report MassLynx MassLynx V4.1 SCN 901**

Dataset: C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld

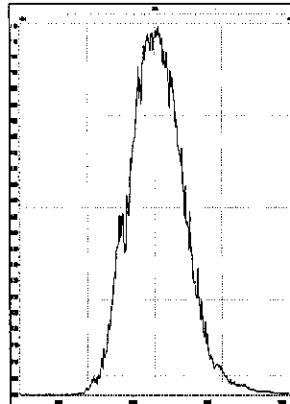
Last Altered: Tuesday, December 08, 2015 13:30:44 Eastern Standard Time

Printed: Tuesday, December 15, 2015 13:11:06 Eastern Standard Time

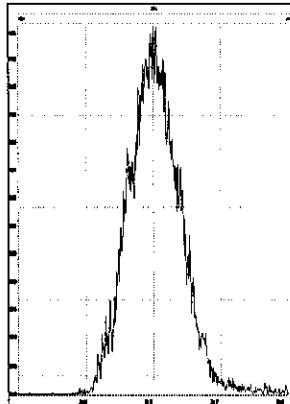
Date	Time	Event	Details	Comments
08-Dec-15	13:30:40	Process Extract		
08-Dec-15	13:30:41	Process Integrate		
08-Dec-15	13:30:41	Process Quantify		
08-Dec-15	13:30:44	Dataset Created		
08-Dec-15	13:36:49	Dataset Saved	Saved to 'C:\MassLynx\PCB.PRO\Results\5-151207C-QC.qld'	

Printed: Tuesday, December 08, 2015 01:44:35 Eastern Standard Time

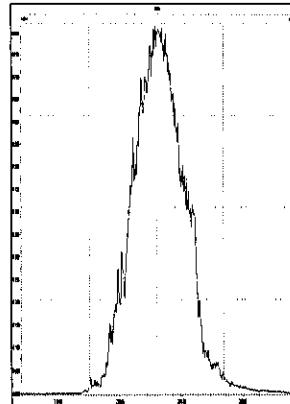
M 180.9888 R 10894



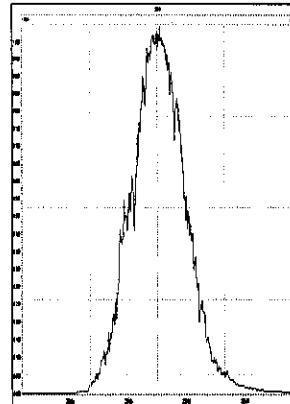
M 204.9888 R 12197



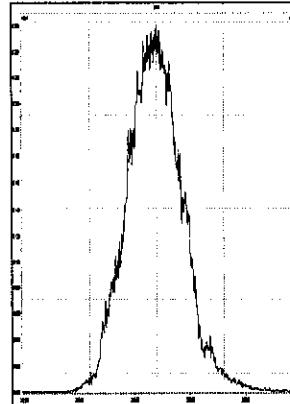
M 218.9856 R 11628



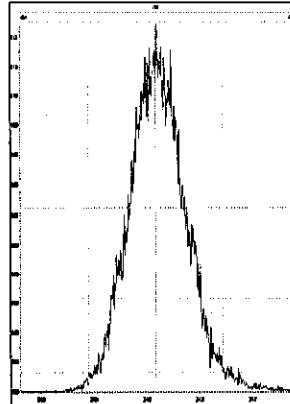
M 230.9856 R 10660



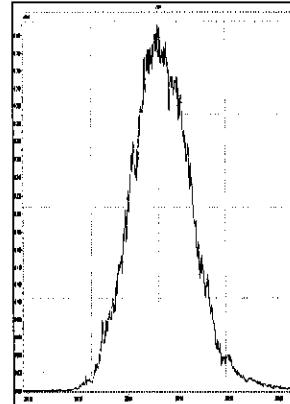
M 242.9856 R 10619



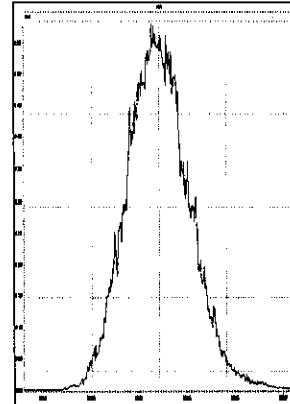
M 254.9856 R 10638



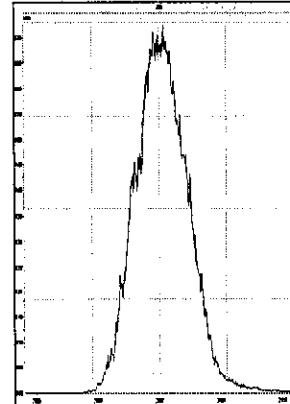
M 268.9824 R 9433



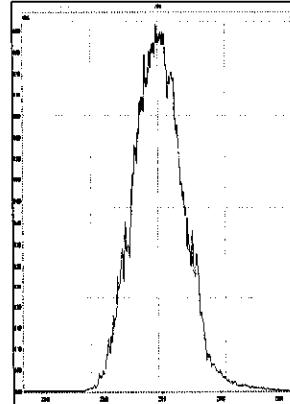
M 280.9824 R 9041



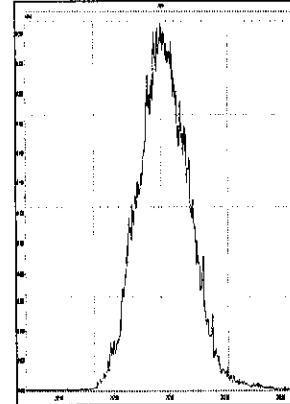
M 218.9856 R 11441



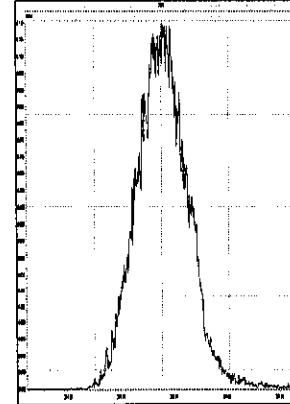
M 230.9856 R 11685



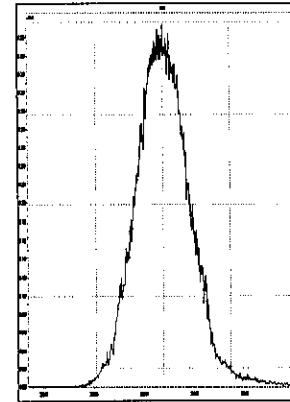
M 242.9856 R 11684



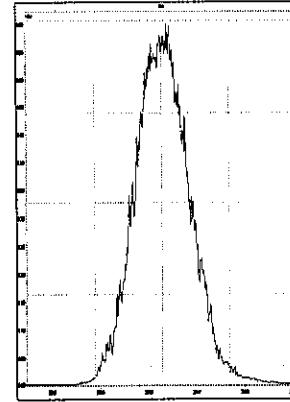
M 254.9856 R 11574



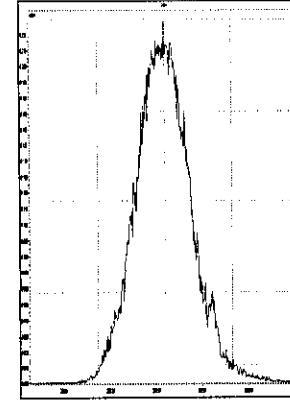
M 268.9824 R 10664



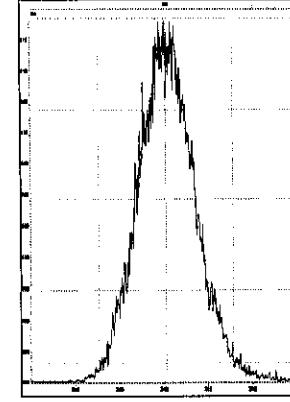
M 280.9824 R 10460



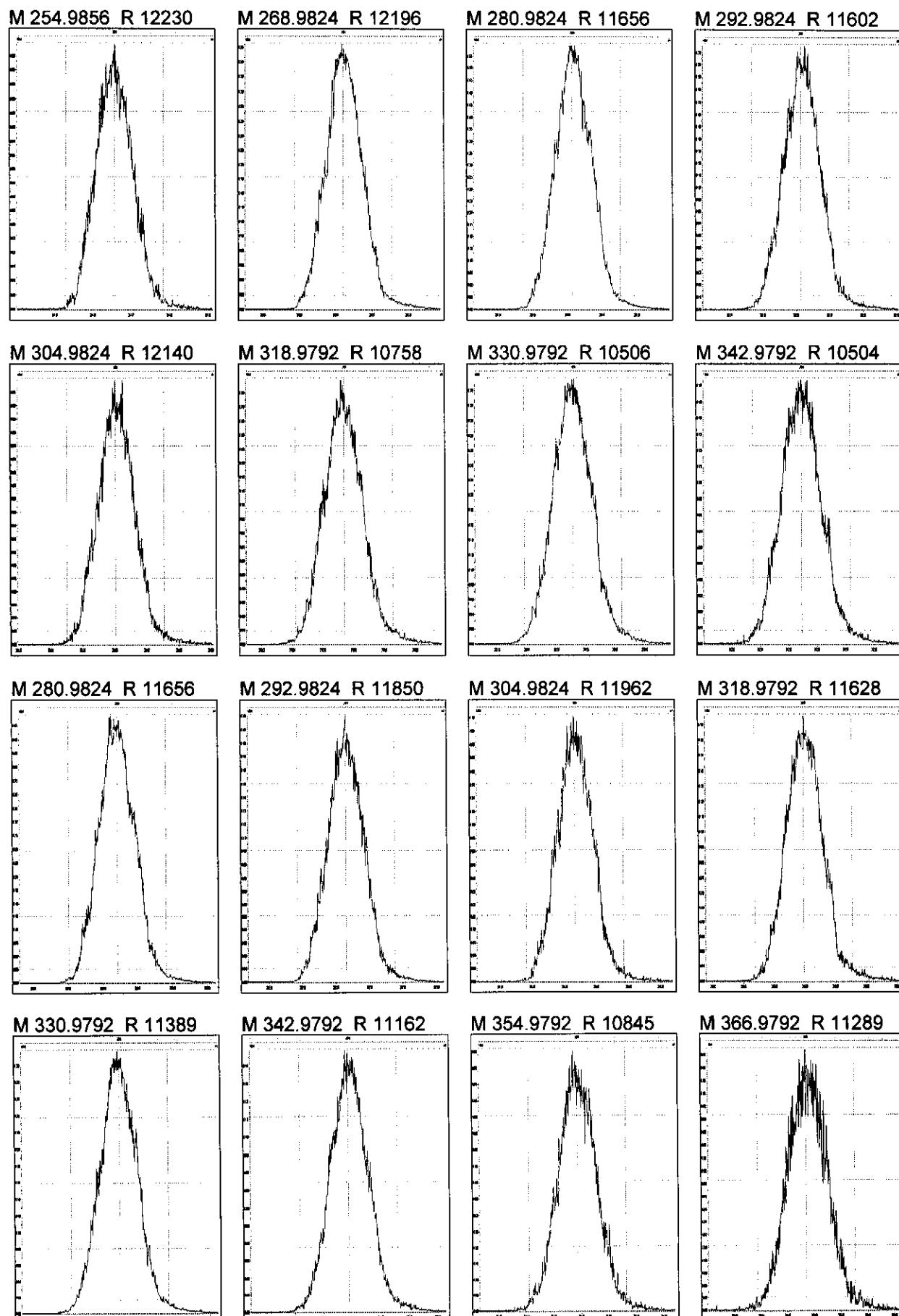
M 292.9824 R 10549



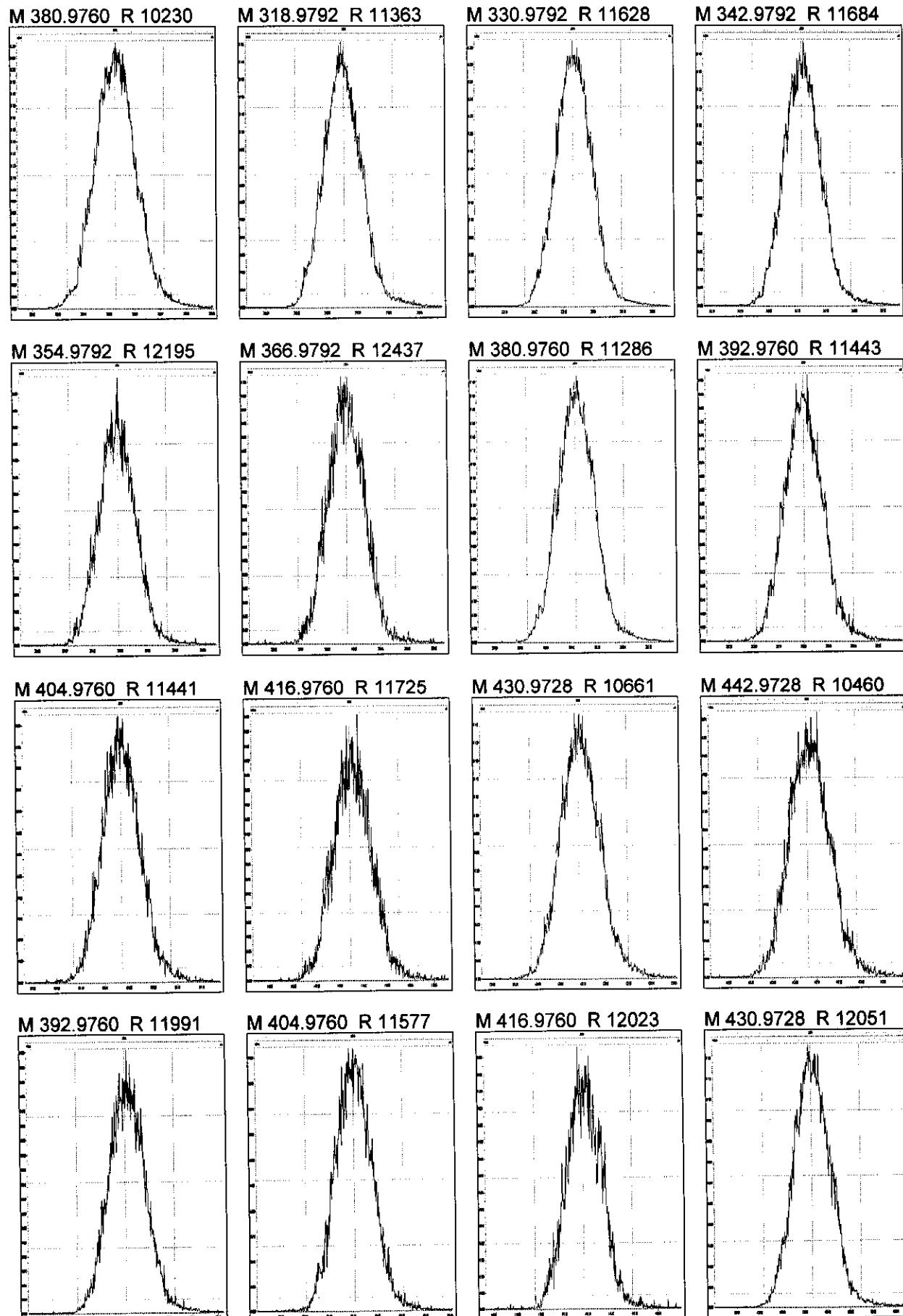
M 304.9824 R 10551



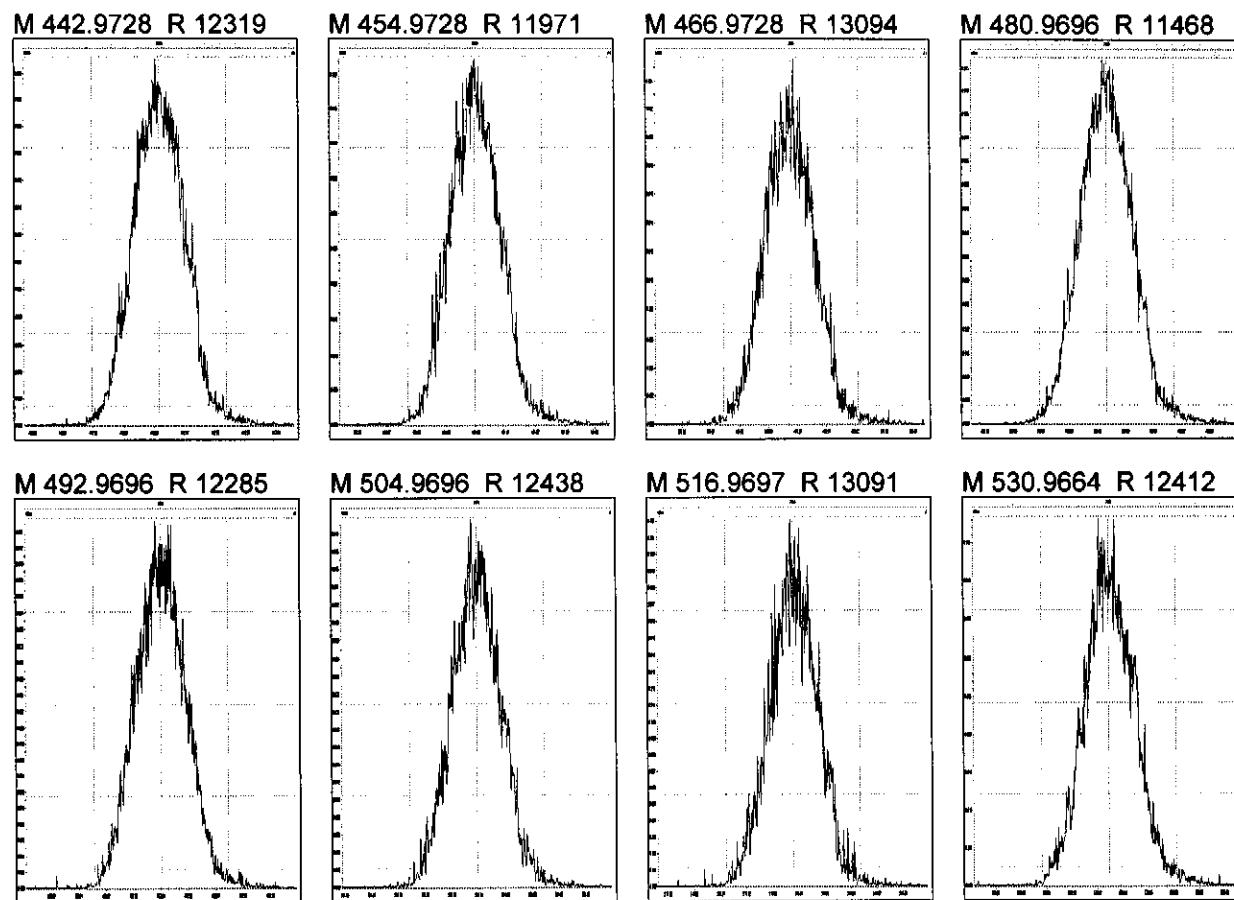
Printed: Tuesday, December 08, 2015 01:44:35 Eastern Standard Time



Printed: Tuesday, December 08, 2015 01:44:35 Eastern Standard Time

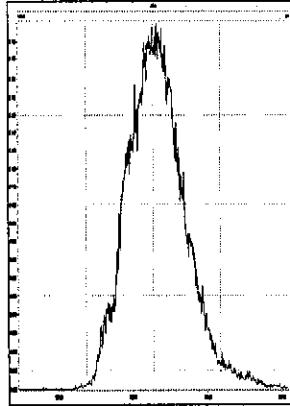


Printed: Tuesday, December 08, 2015 01:44:35 Eastern Standard Time

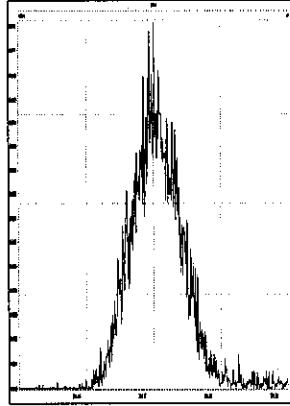


Printed: Tuesday, December 08, 2015 12:27:02 Eastern Standard Time

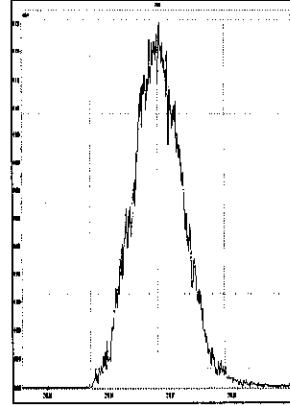
M 180.9888 R 10001



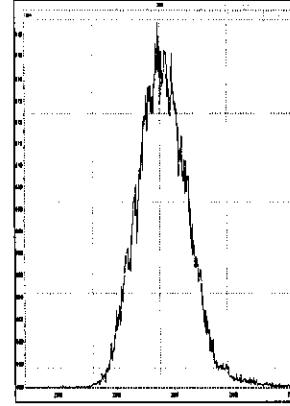
M 204.9888 R 13230



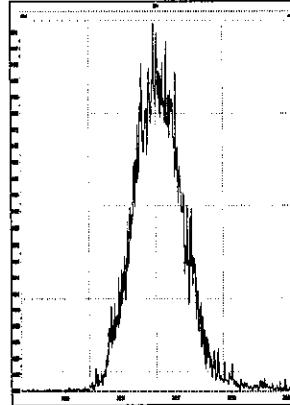
M 218.9856 R 12345



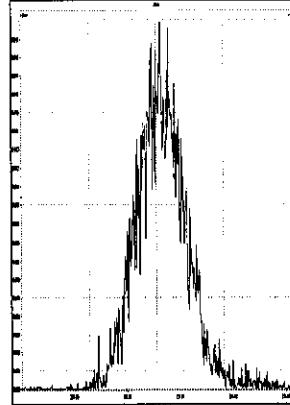
M 230.9856 R 11557



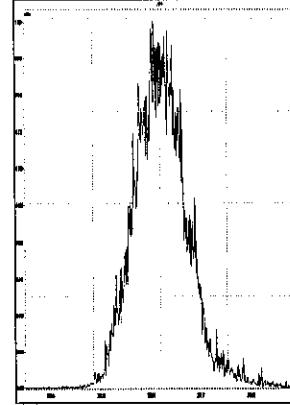
M 242.9856 R 12504



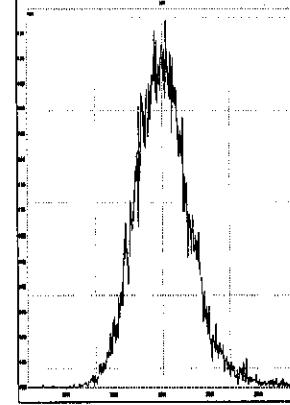
M 254.9856 R 14111



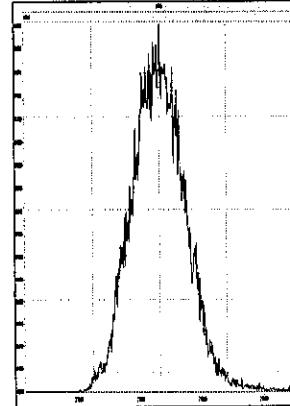
M 268.9824 R 11905



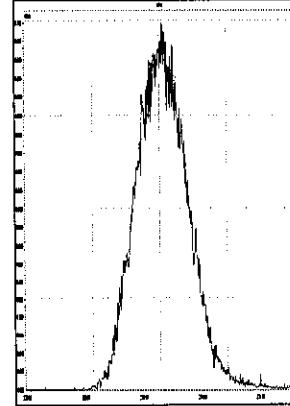
M 280.9824 R 11186



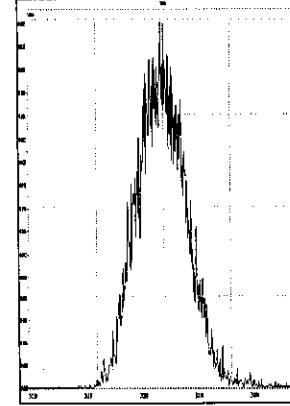
M 218.9856 R 11240



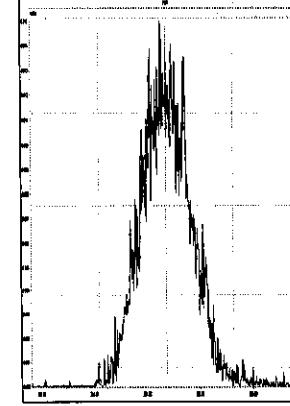
M 230.9856 R 11876



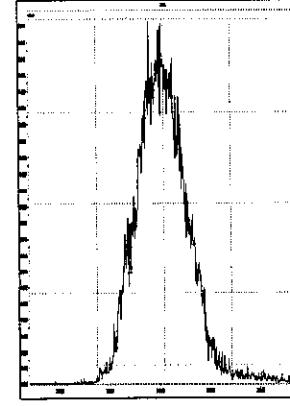
M 242.9856 R 12284



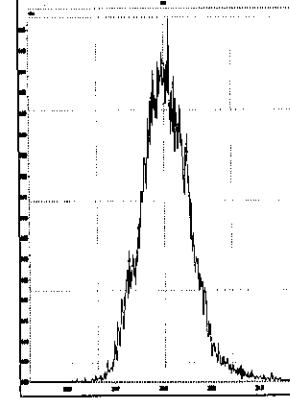
M 254.9856 R 13476



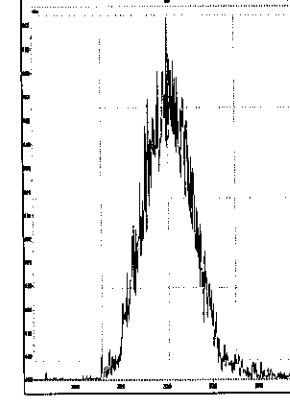
M 268.9824 R 12660



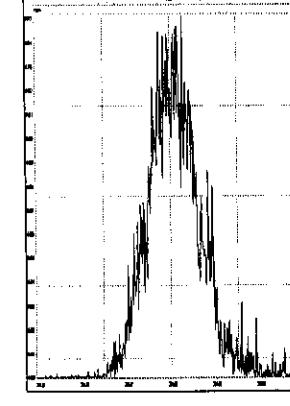
M 280.9824 R 12226



M 292.9824 R 13311

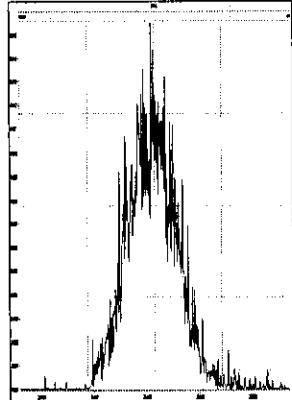


M 304.9824 R 13826

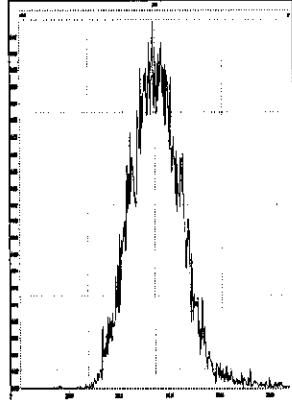


Printed: Tuesday, December 08, 2015 12:27:02 Eastern Standard Time

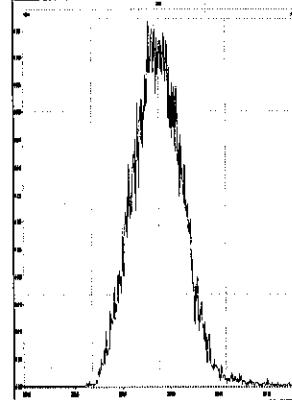
M 254.9856 R 12631



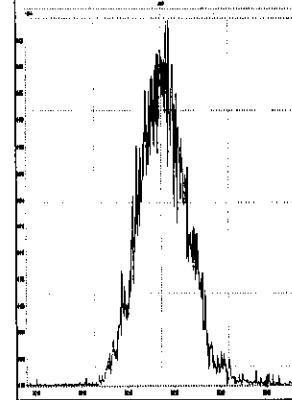
M 268.9824 R 12136



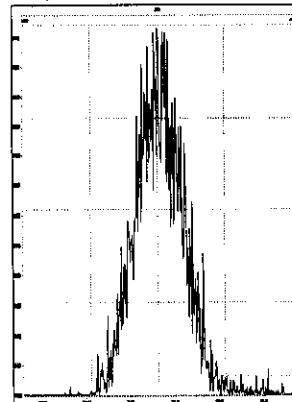
M 280.9824 R 12168



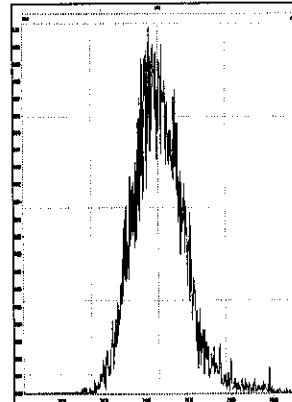
M 292.9824 R 13283



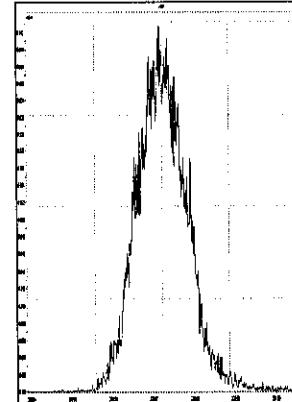
M 304.9824 R 14660



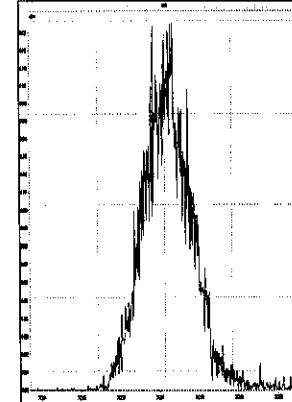
M 318.9792 R 12561



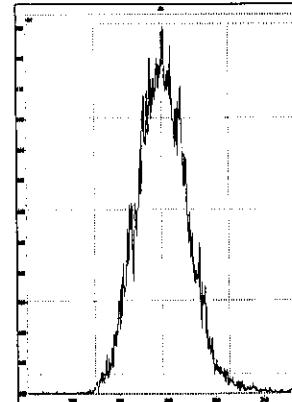
M 330.9792 R 12195



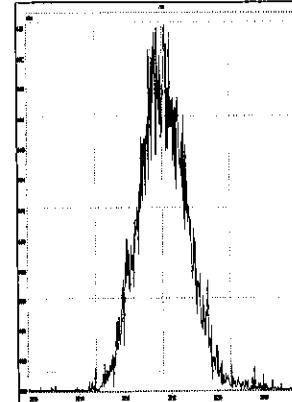
M 342.9792 R 13845



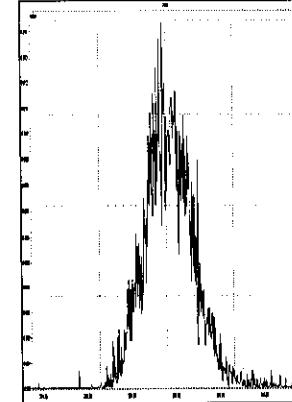
M 280.9824 R 11764



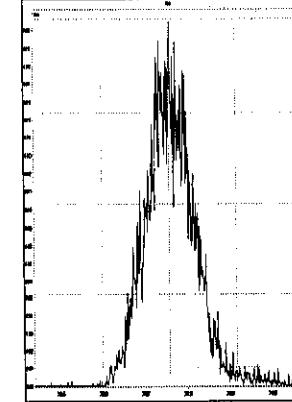
M 292.9824 R 12965



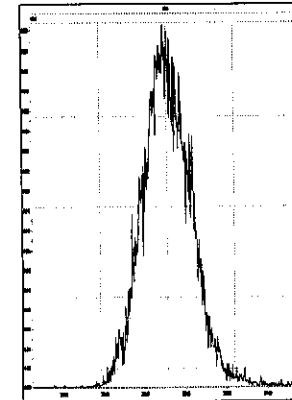
M 304.9824 R 13592



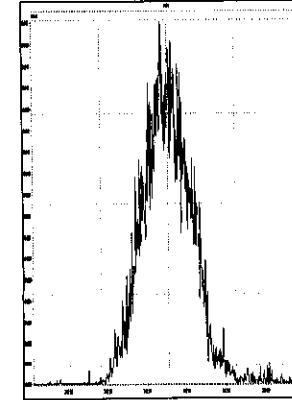
M 318.9792 R 13026



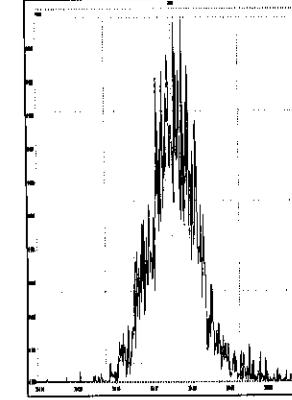
M 330.9792 R 12928



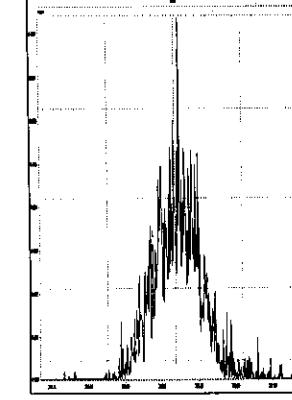
M 342.9792 R 13710



M 354.9792 R 14146

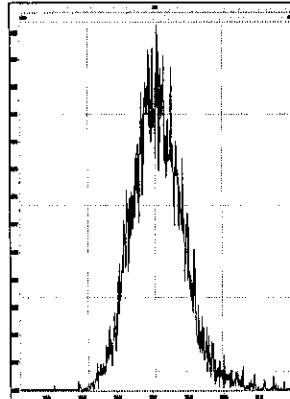


M 366.9792 R 14308

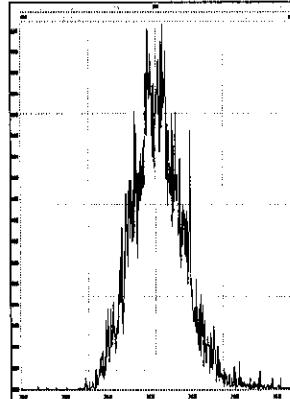


Printed: Tuesday, December 08, 2015 12:27:02 Eastern Standard Time

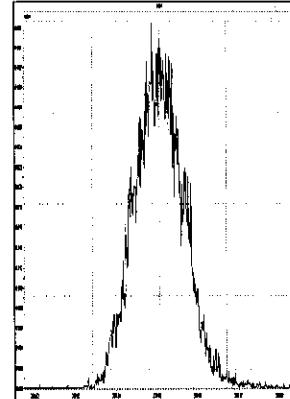
M 380.9760 R 12501



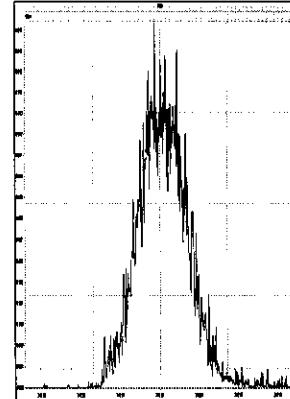
M 318.9792 R 12445



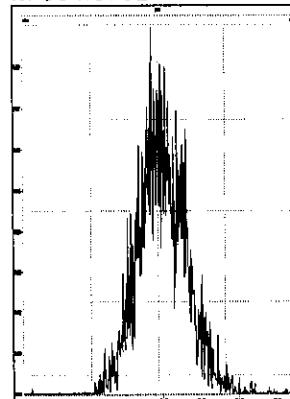
M 330.9792 R 12594



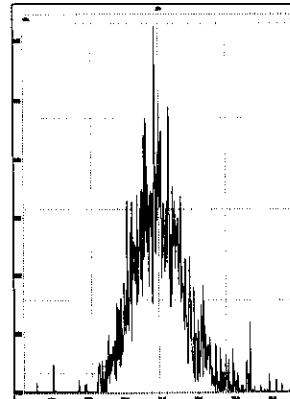
M 342.9792 R 13623



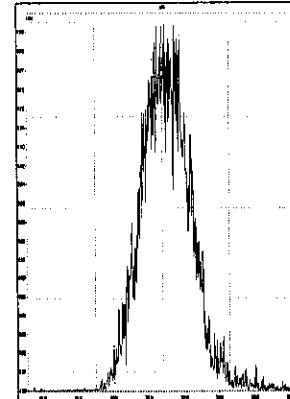
M 354.9792 R 14792



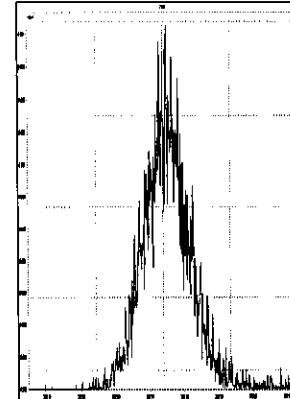
M 366.9792 R 15441



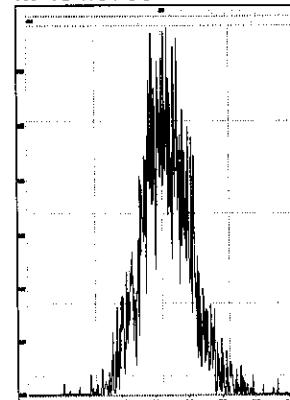
M 380.9760 R 13056



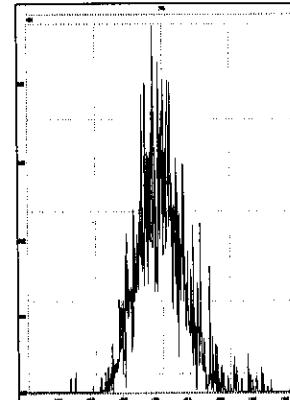
M 392.9760 R 14452



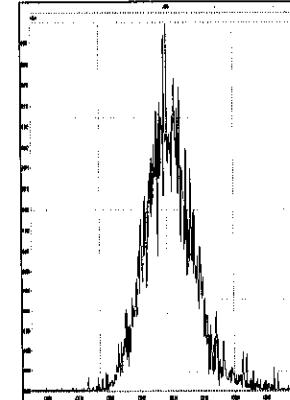
M 404.9760 R 14597



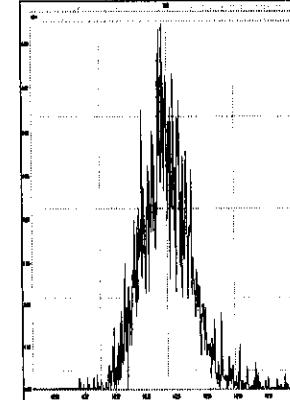
M 416.9760 R 17503



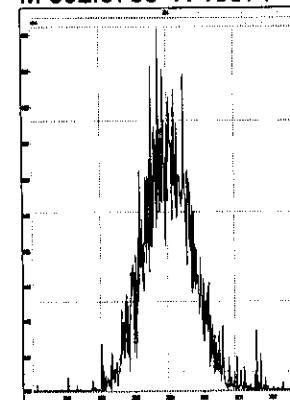
M 430.9728 R 12234



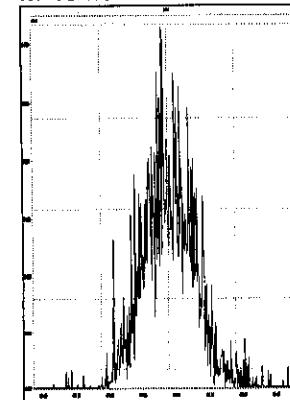
M 442.9728 R 14235



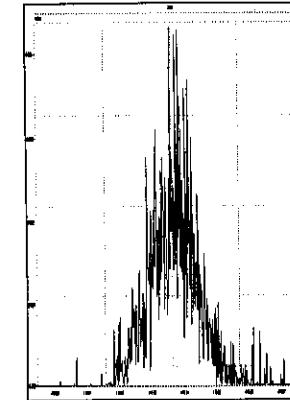
M 392.9760 R 13371



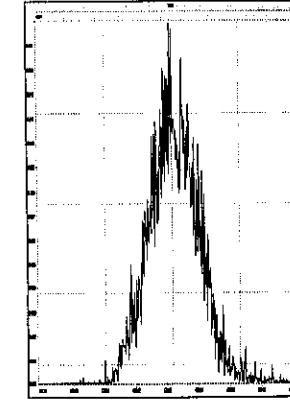
M 404.9760 R 16981



M 416.9760 R 15486

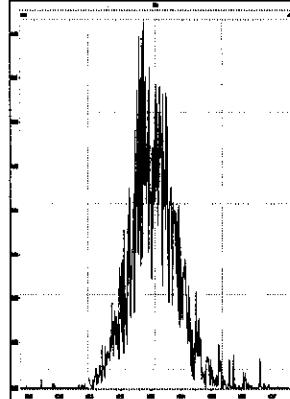


M 430.9728 R 13404

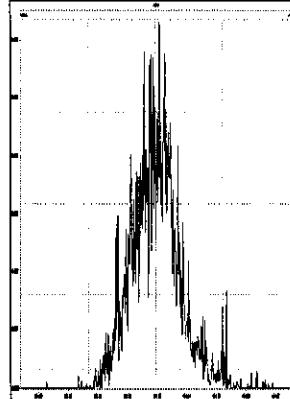


Printed: Tuesday, December 08, 2015 12:27:02 Eastern Standard Time

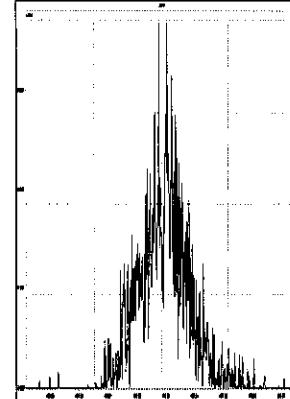
M 442.9728 R 14885



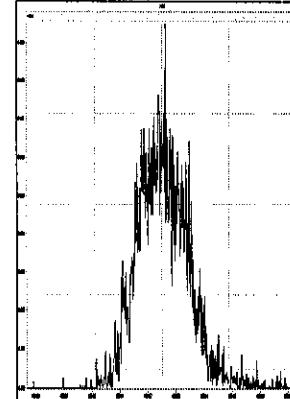
M 454.9728 R 14713



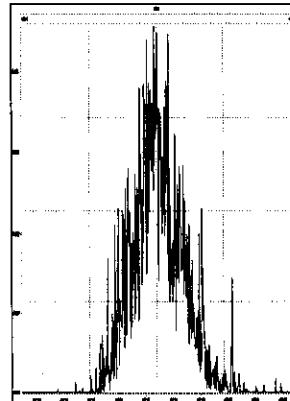
M 466.9728 R 20223



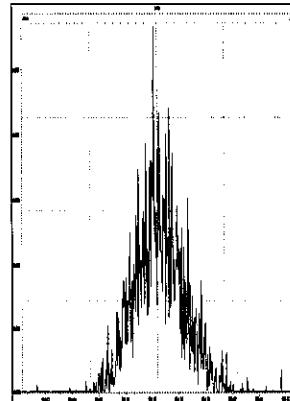
M 480.9696 R 15060



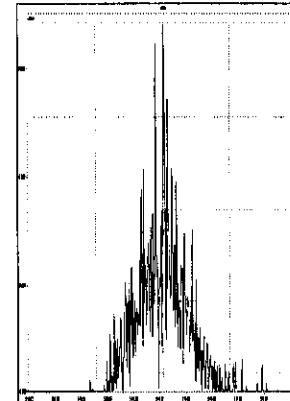
M 492.9696 R 14858



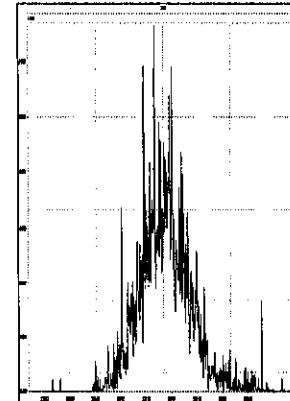
M 504.9696 R 17174



M 516.9697 R 19467



M 530.9664 R 15609





## ALS Houston Full Service Data

**ALS Environmental - Houston HRMS**  
10450 Stancliff Rd., Suite 320, Houston TX 77099  
Phone (713)266-1599 Fax (713)266-0130  
[www.alsglobal.com](http://www.alsglobal.com)



---

ALS Environmental  
ALS Group USA, Corp  
10450 Stancliff Rd, Suite 210  
Houston, TX 77099  
**T:** 1-713-266-1599  
**F:** 1-713-266-0130  
**www.alsglobal.com**

October 21, 2015

**Analytical Report for Service Request No: E1500973**

Jacquelyn Young  
San Jacinto River Coalition  
3262 Westheimer Road #142  
Houston, TX 77098

**Laboratory Results for: San Jacinto River Coalition/SJRC (b) (6)**

Dear Jacquelyn:

Enclosed are the results of the sample(s) submitted to our laboratory on September 29, 2015. For your reference, these analyses have been assigned our service request number **E1500973**.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current TNI standards, where applicable, and except as noted in the laboratory case narrative provided. All results are intended to be considered in their entirety, and ALS Environmental is not responsible for use of less than the final complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report. In accordance to the TNI 2009 Standard, a statement on the estimated uncertainty of measurement of any quantitative analysis will be supplied upon request.

Please contact me if you have any questions. My extension is 2279. You may also contact me via email at Arthi.Kodur@alsglobal.com.

Respectfully submitted,

**ALS Group USA Corp. dba ALS Environmental**

A handwritten signature in black ink, appearing to read "Arthi Kodur".

Arthi Kodur  
Project Manager

Page 1 of \_\_\_\_\_

*For a specific list of NELAP-accredited analytes, refer to the certifications section at [www.alsglobal.com](http://www.alsglobal.com).*



---

10450 Stancliff Rd. Suite 210  
Houston, TX 77099  
T: +1 281 530 5656  
F: +1 281 530 5887  
[www.alsglobal.com](http://www.alsglobal.com)

October 12, 2015

Arthi Kodur  
ALS  
19408 Park Row, Suite 320  
Houston, TX 77084

Work Order: **HS15100056**

Laboratory Results for: **San Jacinto River Coalition (b) (6)**

Dear Arthi,

ALS Environmental received 3 sample(s) on Sep 30, 2015 for the analysis presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

If you have any questions regarding this report, please feel free to call me.

Sincerely,

A handwritten signature in black ink that reads "Erica Padilla".

Generated By: Jumoke.Lawal

Erica Padilla

PM

**Client:** ALS  
**Project:** San Jacinto River Coalition (b) (6)  
**Work Order:** HS15100056

**SAMPLE SUMMARY**

Lab Samp ID	Client Sample ID	Matrix	TagNo	Collection Date	Date Received	Hold
HS15100056-01	SJRC (b) (6) #3H	Water		29-Sep-2015 13:00	30-Sep-2015 15:10	<input type="checkbox"/>
HS15100056-02	SJRC #4H	Water		29-Sep-2015 13:00	30-Sep-2015 15:10	<input type="checkbox"/>
HS15100056-03	SJRC #5H	Water		29-Sep-2015 13:00	30-Sep-2015 15:10	<input type="checkbox"/>

**Client:** ALS  
**Project:** San Jacinto River Coalition (b) (6)  
**Work Order:** HS15100056

**CASE NARRATIVE****GCMS Semivolatiles by Method SW8270****Batch ID: 97793**

Sample ID: **LCS-97793**

- Insufficient sample received to perform MS/MSD. LCS/LCSD provided as batch quality control.

Sample ID: **LCSD-97793**

- The RPD between the LCS and LCSD was outside of the control limit.

**GCMS Volatiles by Method SW8260****Batch ID: R262646**

Sample ID: **HS15100209-02MS**

- MS and MSD are for unrelated sample

**Metals by Method SW7470****Batch ID: 97685**

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

**Metals by Method SW6020****Batch ID: 97670**

Sample ID: **HS15100026-01MS**

- MS/MSD and DUPs are for an unrelated sample

Client: ALS  
 Project: San Jacinto River Coalition (b) (6)  
 Sample ID: SJRC(b) (6) #3H  
 Collection Date: 29-Sep-2015 13:00

**ANALYTICAL REPORT**  
 WorkOrder:HS15100056  
 Lab ID:HS15100056-01  
 Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
<b>LOW-LEVEL SEMIVOLATILES</b>		<b>Method:SW8270</b>					
1,1'-Biphenyl	U		0.032	0.20	ug/L	1	08-Oct-2015 13:45
2,4,5-Trichlorophenol	U		0.040	0.20	ug/L	1	08-Oct-2015 13:45
2,4,6-Trichlorophenol	U		0.060	0.20	ug/L	1	08-Oct-2015 13:45
2,4-Dichlorophenol	U		0.065	0.20	ug/L	1	08-Oct-2015 13:45
2,4-Dimethylphenol	U		0.033	0.20	ug/L	1	08-Oct-2015 13:45
2,4-Dinitrophenol	U		0.050	1.0	ug/L	1	08-Oct-2015 13:45
2,4-Dinitrotoluene	U		0.030	0.20	ug/L	1	08-Oct-2015 13:45
2,6-Dinitrotoluene	U		0.050	0.20	ug/L	1	08-Oct-2015 13:45
2-Chloronaphthalene	U		0.040	0.20	ug/L	1	08-Oct-2015 13:45
2-Chlorophenol	U		0.040	0.20	ug/L	1	08-Oct-2015 13:45
2-Methylnaphthalene	U		0.034	0.20	ug/L	1	08-Oct-2015 13:45
2-Methylphenol	U		0.033	0.20	ug/L	1	08-Oct-2015 13:45
2-Nitroaniline	U		0.038	0.20	ug/L	1	08-Oct-2015 13:45
2-Nitrophenol	U		0.024	0.20	ug/L	1	08-Oct-2015 13:45
3&4-Methylphenol	U		0.030	0.20	ug/L	1	08-Oct-2015 13:45
3,3'-Dichlorobenzidine	U		0.024	0.20	ug/L	1	08-Oct-2015 13:45
3-Nitroaniline	U		0.056	0.20	ug/L	1	08-Oct-2015 13:45
4,6-Dinitro-2-methylphenol	U		0.073	0.20	ug/L	1	08-Oct-2015 13:45
4-Bromophenyl phenyl ether	U		0.047	0.20	ug/L	1	08-Oct-2015 13:45
4-Chloro-3-methylphenol	U		0.022	0.20	ug/L	1	08-Oct-2015 13:45
4-Chloroaniline	U		0.021	0.20	ug/L	1	08-Oct-2015 13:45
4-Chlorophenyl phenyl ether	U		0.043	0.20	ug/L	1	08-Oct-2015 13:45
4-Nitroaniline	U		0.040	0.20	ug/L	1	08-Oct-2015 13:45
4-Nitrophenol	U		0.060	1.0	ug/L	1	08-Oct-2015 13:45
Acenaphthene	U		0.030	0.20	ug/L	1	08-Oct-2015 13:45
Acenaphthylene	U		0.021	0.20	ug/L	1	08-Oct-2015 13:45
Acetophenone	U		0.030	0.20	ug/L	1	08-Oct-2015 13:45
Anthracene	U		0.020	0.20	ug/L	1	08-Oct-2015 13:45
Atrazine	U		0.040	0.20	ug/L	1	08-Oct-2015 13:45
Benz(a)anthracene	U		0.025	0.20	ug/L	1	08-Oct-2015 13:45
Benzaldehyde	U	n	0.046	0.20	ug/L	1	08-Oct-2015 13:45
Benzo(a)pyrene	U		0.030	0.20	ug/L	1	08-Oct-2015 13:45
Benzo(b)fluoranthene	U		0.028	0.20	ug/L	1	08-Oct-2015 13:45
Benzo(g,h,i)perylene	U		0.026	0.20	ug/L	1	08-Oct-2015 13:45
Benzo(k)fluoranthene	U		0.028	0.20	ug/L	1	08-Oct-2015 13:45
Bis(2-chloroethoxy)methane	U		0.022	0.20	ug/L	1	08-Oct-2015 13:45
Bis(2-chloroethyl)ether	U		0.029	0.20	ug/L	1	08-Oct-2015 13:45
Bis(2-chloroisopropyl)ether	U		0.064	0.20	ug/L	1	08-Oct-2015 13:45
<b>Bis(2-ethylhexyl)phthalate</b>	<b>0.076</b>	J	<b>0.033</b>	<b>0.20</b>	<b>ug/L</b>	1	08-Oct-2015 13:45

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: ALS  
 Project: San Jacinto River Coalition (b) (6)  
 Sample ID: SJRC (b) (6) #3H  
 Collection Date: 29-Sep-2015 13:00

**ANALYTICAL REPORT**  
 WorkOrder:HS15100056  
 Lab ID:HS15100056-01  
 Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
<b>LOW-LEVEL SEMIVOLATILES</b>		<b>Method:SW8270</b>					
Butyl benzyl phthalate	U		0.021	0.20	ug/L	1	08-Oct-2015 13:45
<b>Caprolactam</b>	<b>0.23</b>		<b>0.059</b>	<b>0.20</b>	<b>ug/L</b>	<b>1</b>	<b>08-Oct-2015 13:45</b>
Carbazole	U		0.025	0.20	ug/L	1	08-Oct-2015 13:45
Chrysene	U		0.046	0.20	ug/L	1	08-Oct-2015 13:45
Dibenz(a,h)anthracene	U		0.026	0.20	ug/L	1	08-Oct-2015 13:45
Dibenzofuran	U		0.025	0.20	ug/L	1	08-Oct-2015 13:45
<b>Diethyl phthalate</b>	<b>0.068</b>	J	<b>0.021</b>	<b>0.20</b>	<b>ug/L</b>	<b>1</b>	<b>08-Oct-2015 13:45</b>
Dimethyl phthalate	U		0.030	0.20	ug/L	1	08-Oct-2015 13:45
Di-n-butyl phthalate	U		0.030	0.20	ug/L	1	08-Oct-2015 13:45
Di-n-octyl phthalate	U		0.023	0.20	ug/L	1	08-Oct-2015 13:45
Fluoranthene	U		0.020	0.20	ug/L	1	08-Oct-2015 13:45
Fluorene	U		0.021	0.20	ug/L	1	08-Oct-2015 13:45
Hexachlorobenzene	U		0.070	0.20	ug/L	1	08-Oct-2015 13:45
Hexachlorobutadiene	U		0.050	0.20	ug/L	1	08-Oct-2015 13:45
Hexachlorocyclopentadiene	U		0.054	0.20	ug/L	1	08-Oct-2015 13:45
Hexachloroethane	U		0.034	0.20	ug/L	1	08-Oct-2015 13:45
Indeno(1,2,3-cd)pyrene	U		0.051	0.20	ug/L	1	08-Oct-2015 13:45
Isophorone	U		0.030	0.20	ug/L	1	08-Oct-2015 13:45
Naphthalene	U		0.050	0.20	ug/L	1	08-Oct-2015 13:45
Nitrobenzene	U		0.050	0.20	ug/L	1	08-Oct-2015 13:45
N-Nitrosodi-n-propylamine	U		0.040	0.20	ug/L	1	08-Oct-2015 13:45
N-Nitrosodiphenylamine	U		0.029	0.20	ug/L	1	08-Oct-2015 13:45
Pentachlorophenol	U		0.046	0.20	ug/L	1	08-Oct-2015 13:45
Phenanthren	U		0.020	0.20	ug/L	1	08-Oct-2015 13:45
Phenol	U		0.032	0.20	ug/L	1	08-Oct-2015 13:45
Pyrene	U		0.022	0.20	ug/L	1	08-Oct-2015 13:45
<i>Surr: 2,4,6-Tribromophenol</i>	71.9			34-129	%REC	1	08-Oct-2015 13:45
<i>Surr: 2-Fluorobiphenyl</i>	72.1			40-125	%REC	1	08-Oct-2015 13:45
<i>Surr: 2-Fluorophenol</i>	58.0			20-120	%REC	1	08-Oct-2015 13:45
<i>Surr: 4-Terphenyl-d14</i>	81.1			40-135	%REC	1	08-Oct-2015 13:45
<i>Surr: Nitrobenzene-d5</i>	71.1			41-120	%REC	1	08-Oct-2015 13:45
<i>Surr: Phenol-d6</i>	69.8			20-120	%REC	1	08-Oct-2015 13:45

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: ALS  
 Project: San Jacinto River Coalition (b) (6)  
 Sample ID: SJRC (b) (6) #4H  
 Collection Date: 29-Sep-2015 13:00

**ANALYTICAL REPORT**  
 WorkOrder:HS15100056  
 Lab ID:HS15100056-02  
 Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
<b>ICP-MS METALS BY SW6020A</b>		<b>Method:SW6020</b>					
Barium	0.0655		0.00190	0.00500	mg/L	1	06-Oct-2015 15:27
Boron	0.149		0.0110	0.0500	mg/L	1	06-Oct-2015 17:50
Cadmium	U		0.000200	0.00200	mg/L	1	06-Oct-2015 15:27
Chromium	U		0.000400	0.00500	mg/L	1	06-Oct-2015 15:27
Copper	0.00341	J	0.00100	0.00500	mg/L	1	06-Oct-2015 17:50
Lead	U		0.000600	0.00500	mg/L	1	06-Oct-2015 15:27
Manganese	0.00578		0.000700	0.00500	mg/L	1	06-Oct-2015 15:27
Nickel	0.00108	J	0.000600	0.00500	mg/L	1	06-Oct-2015 15:27
Zinc	0.0365		0.00200	0.00500	mg/L	1	06-Oct-2015 15:27
<b>MERCURY BY SW7470A</b>		<b>Method:SW7470</b>					
Mercury	U		0.0000400	0.000200	mg/L	1	02-Oct-2015 14:03

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: ALS  
 Project: San Jacinto River Coalition (b) (6)  
 Sample ID: SJRC(b) (6) #5H  
 Collection Date: 29-Sep-2015 13:00

**ANALYTICAL REPORT**  
 WorkOrder:HS15100056  
 Lab ID:HS15100056-03  
 Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
<b>LOW LEVEL VOLATILES BY SW8260C</b>		<b>Method:SW8260</b>					
1,1,1-Trichloroethane	U		0.20	1.0	ug/L	1	07-Oct-2015 17:07
1,1,2,2-Tetrachloroethane	U		0.50	1.0	ug/L	1	07-Oct-2015 17:07
1,1,2-Trichlor-1,2,2-trifluoroethane	U		1.0	1.0	ug/L	1	07-Oct-2015 17:07
1,1,2-Trichloroethane	U		0.30	1.0	ug/L	1	07-Oct-2015 17:07
1,1-Dichloroethane	U		0.20	1.0	ug/L	1	07-Oct-2015 17:07
1,1-Dichloroethene	U		0.20	1.0	ug/L	1	07-Oct-2015 17:07
1,2,4-Trichlorobenzene	U		0.50	1.0	ug/L	1	07-Oct-2015 17:07
1,2-Dibromo-3-chloropropane	U		1.0	1.0	ug/L	1	07-Oct-2015 17:07
1,2-Dibromoethane	U		0.20	1.0	ug/L	1	07-Oct-2015 17:07
1,2-Dichlorobenzene	U		0.50	1.0	ug/L	1	07-Oct-2015 17:07
1,2-Dichloroethane	U		0.20	1.0	ug/L	1	07-Oct-2015 17:07
1,2-Dichloropropane	U		0.50	1.0	ug/L	1	07-Oct-2015 17:07
1,3-Dichlorobenzene	U		0.40	1.0	ug/L	1	07-Oct-2015 17:07
1,4-Dichlorobenzene	U		0.40	1.0	ug/L	1	07-Oct-2015 17:07
2-Butanone	U		0.50	2.0	ug/L	1	07-Oct-2015 17:07
2-Hexanone	U		1.0	2.0	ug/L	1	07-Oct-2015 17:07
4-Methyl-2-pentanone	U		0.70	2.0	ug/L	1	07-Oct-2015 17:07
Acetone	U		2.0	2.0	ug/L	1	07-Oct-2015 17:07
Benzene	U		0.20	1.0	ug/L	1	07-Oct-2015 17:07
Bromodichloromethane	U		0.20	1.0	ug/L	1	07-Oct-2015 17:07
Bromoform	U		0.40	1.0	ug/L	1	07-Oct-2015 17:07
Bromomethane	U		0.40	1.0	ug/L	1	07-Oct-2015 17:07
Carbon disulfide	U		0.60	2.0	ug/L	1	07-Oct-2015 17:07
Carbon tetrachloride	U		0.50	1.0	ug/L	1	07-Oct-2015 17:07
Chlorobenzene	U		0.30	1.0	ug/L	1	07-Oct-2015 17:07
Chloroethane	U		0.30	1.0	ug/L	1	07-Oct-2015 17:07
Chloroform	U		0.20	1.0	ug/L	1	07-Oct-2015 17:07
Chloromethane	U		0.20	1.0	ug/L	1	07-Oct-2015 17:07
cis-1,2-Dichloroethene	U		0.20	1.0	ug/L	1	07-Oct-2015 17:07
cis-1,3-Dichloropropene	U		0.10	1.0	ug/L	1	07-Oct-2015 17:07
Cyclohexane	U	n	0.30	1.0	ug/L	1	07-Oct-2015 17:07
Dibromochloromethane	U		0.30	1.0	ug/L	1	07-Oct-2015 17:07
Dichlorodifluoromethane	U		0.30	1.0	ug/L	1	07-Oct-2015 17:07
Ethylbenzene	U		0.30	1.0	ug/L	1	07-Oct-2015 17:07
Isopropylbenzene	U		0.30	1.0	ug/L	1	07-Oct-2015 17:07
m,p-Xylene	U		0.50	2.0	ug/L	1	07-Oct-2015 17:07
Methyl acetate	U		1.0	1.0	ug/L	1	07-Oct-2015 17:07
Methyl tert-butyl ether	U		0.20	1.0	ug/L	1	07-Oct-2015 17:07
Methylcyclohexane	U		0.30	1.0	ug/L	1	07-Oct-2015 17:07

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: ALS  
 Project: San Jacinto River Coalition (b) (6)  
 Sample ID: SJRC (b) (6) #5H  
 Collection Date: 29-Sep-2015 13:00

**ANALYTICAL REPORT**  
 WorkOrder:HS15100056  
 Lab ID:HS15100056-03  
 Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED	
<b>LOW LEVEL VOLATILES BY SW8260C</b>		<b>Method:SW8260</b>						
Methylene chloride	U		1.0	2.0	ug/L	1	07-Oct-2015 17:07	
o-Xylene	U		0.30	1.0	ug/L	1	07-Oct-2015 17:07	
Styrene	U		0.30	1.0	ug/L	1	07-Oct-2015 17:07	
Tetrachloroethene	U		0.30	1.0	ug/L	1	07-Oct-2015 17:07	
Toluene	U		0.20	1.0	ug/L	1	07-Oct-2015 17:07	
trans-1,2-Dichloroethene	U		0.20	1.0	ug/L	1	07-Oct-2015 17:07	
trans-1,3-Dichloropropene	U		0.20	1.0	ug/L	1	07-Oct-2015 17:07	
Trichloroethene	U		0.20	1.0	ug/L	1	07-Oct-2015 17:07	
Trichlorofluoromethane	U		0.30	1.0	ug/L	1	07-Oct-2015 17:07	
Vinyl chloride	U		0.20	1.0	ug/L	1	07-Oct-2015 17:07	
Xylenes, Total	U		0.50	3.0	ug/L	1	07-Oct-2015 17:07	
<i>Surr: 1,2-Dichloroethane-d4</i>	96.5			71-125	%REC	1	07-Oct-2015 17:07	
<i>Surr: 4-Bromofluorobenzene</i>	99.4			70-125	%REC	1	07-Oct-2015 17:07	
<i>Surr: Dibromofluoromethane</i>	90.5			74-125	%REC	1	07-Oct-2015 17:07	
<i>Surr: Toluene-d8</i>	110			75-125	%REC	1	07-Oct-2015 17:07	

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**WEIGHT LOG****Client:** ALS**Project:** San Jacinto River Coalition (b) (6)**WorkOrder:** HS15100056**Batch ID:** 97670      **Method:** ICP-MS METALS BY SW6020A      **Prep:** 3010A

SampID	Container	Sample Wt/Vol	Final Volume	Prep Factor
HS15100056-02	1	50	50 (mL)	1

**Batch ID:** 97685      **Method:** MERCURY BY SW7470A      **Prep:** HG\_WPR

SampID	Container	Sample Wt/Vol	Final Volume	Prep Factor
HS15100056-02	1	40	40 (mL)	1

**Batch ID:** 97793      **Method:** LOW-LEVEL SEMIVOLATILES      **Prep:** 3510\_B\_LOW

SampID	Container	Sample Wt/Vol	Final Volume	Prep Factor
HS15100056-01	1	1000	1 (mL)	0.001

**Client:** ALS  
**Project:** San Jacinto River Coalition (b) (6)  
**WorkOrder:** HS15100056

**DATES REPORT**

Sample ID	Client Samp ID	Collection Date	TCLP Date	Prep Date	Analysis Date	DF
<b>Batch ID</b>	97670	<b>Test Name :</b> ICP-MS METALS BY SW6020A				
HS15100056-02	SJRC (b) (6) #4H	29 Sep 2015 13:00		02 Oct 2015 08:26	06 Oct 2015 17:50	1
HS15100056-02	SJRC (b) (6) #4H	29 Sep 2015 13:00		02 Oct 2015 08:26	06 Oct 2015 15:27	1
<b>Batch ID</b>	97685	<b>Test Name :</b> MERCURY BY SW7470A				
HS15100056-02	SJRC (b) (6) #4H	29 Sep 2015 13:00		02 Oct 2015 10:12	02 Oct 2015 14:03	1
<b>Batch ID</b>	97793	<b>Test Name :</b> LOW-LEVEL SEMIVOLATILES				
HS15100056-01	SJRC (b) (6) #3H	29 Sep 2015 13:00		06 Oct 2015 18:04	08 Oct 2015 13:45	1
<b>Batch ID</b>	R262646	<b>Test Name :</b> LOW LEVEL VOLATILES BY SW8260C				
HS15100056-03	SJRC (b) (6) #5H	29 Sep 2015 13:00			07 Oct 2015 17:07	1

**Client:** ALS  
**Project:** San Jacinto River Coalition (b) (6)  
**WorkOrder:** HS15100056

**QC BATCH REPORT**

Batch ID: 97670		Instrument: ICPMS05		Method: SW6020			
<b>MLBK</b>	Sample ID: MBLK-97670	Units: mg/L				Analysis Date: 06-Oct-2015 13:44	
Client ID:		Run ID: ICPMS05_262534		SeqNo: 3450895	PrepDate: 02-Oct-2015	DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value %RPD Limit Qual
Barium	U	0.00500					
Cadmium	U	0.00200					
Chromium	U	0.00500					
Copper	U	0.00500					
Lead	U	0.00500					
Manganese	U	0.00500					
Nickel	U	0.00500					
Zinc	0.002847	0.00500					J
<b>MLBK</b>	Sample ID: MBLK-97670	Units: mg/L				Analysis Date: 07-Oct-2015 13:33	
Client ID:		Run ID: ICPMS05_262638		SeqNo: 3452573	PrepDate: 02-Oct-2015	DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value %RPD Limit Qual
Boron	U	0.0500					
<b>LCS</b>	Sample ID: MLCS-97670	Units: mg/L				Analysis Date: 06-Oct-2015 13:47	
Client ID:		Run ID: ICPMS05_262534		SeqNo: 3450896	PrepDate: 02-Oct-2015	DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value %RPD Limit Qual
Barium	0.04802	0.00500	0.05	0	96.0	80 - 120	
Cadmium	0.04781	0.00200	0.05	0	95.6	80 - 120	
Chromium	0.04932	0.00500	0.05	0	98.6	80 - 120	
Copper	0.05046	0.00500	0.05	0	101	80 - 120	
Lead	0.04829	0.00500	0.05	0	96.6	80 - 120	
Manganese	0.04967	0.00500	0.05	0	99.3	80 - 120	
Nickel	0.0492	0.00500	0.05	0	98.4	80 - 120	
Zinc	0.05046	0.00500	0.05	0	101	80 - 120	
<b>LCS</b>	Sample ID: MLCS-97670	Units: mg/L				Analysis Date: 07-Oct-2015 13:36	
Client ID:		Run ID: ICPMS05_262638		SeqNo: 3452574	PrepDate: 02-Oct-2015	DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value %RPD Limit Qual
Boron	0.5009	0.0500	0.5	0	100	80 - 120	

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** ALS  
**Project:** San Jacinto River Coalition (b) (6)  
**WorkOrder:** HS15100056

**QC BATCH REPORT**

Batch ID: 97670		Instrument: ICPMS05		Method: SW6020			
MS	Sample ID: HS15100026-01MS			Units: mg/L		Analysis Date: 06-Oct-2015 13:57	
Client ID:		Run ID: ICPMS05_262534		SeqNo: 3450953	PrepDate: 02-Oct-2015	DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value %RPD Limit Qual
Barium	1.985	0.00500	0.05	1.834	304	80 - 120	SEO
Cadmium	0.05074	0.00200	0.05	0.000002	101	80 - 120	
Chromium	0.04832	0.00500	0.05	0.000272	96.1	80 - 120	
Copper	0.04337	0.00500	0.05	-0.00113	89.0	80 - 120	
Lead	0.0496	0.00500	0.05	0.000045	99.1	80 - 120	
Manganese	0.3063	0.00500	0.05	0.2509	111	80 - 120	O
Nickel	0.04526	0.00500	0.05	0.000904	88.7	80 - 120	
Zinc	0.0509	0.00500	0.05	0.002647	96.5	80 - 120	
MS	Sample ID: HS15100026-01MS			Units: mg/L		Analysis Date: 07-Oct-2015 13:44	
Client ID:		Run ID: ICPMS05_262638		SeqNo: 3452577	PrepDate: 02-Oct-2015	DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value %RPD Limit Qual
Boron	0.7771	0.0500	0.5	0.1903	117	80 - 120	
MSD	Sample ID: HS15100026-01MSD			Units: mg/L		Analysis Date: 06-Oct-2015 14:00	
Client ID:		Run ID: ICPMS05_262534		SeqNo: 3450954	PrepDate: 02-Oct-2015	DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value %RPD Limit Qual
Barium	1.98	0.00500	0.05	1.834	294	80 - 120	1.985 0.254 20 SEO
Cadmium	0.05135	0.00200	0.05	0.000002	103	80 - 120	0.05074 1.2 20
Chromium	0.04869	0.00500	0.05	0.000272	96.8	80 - 120	0.04832 0.765 20
Copper	0.04339	0.00500	0.05	-0.00113	89.0	80 - 120	0.04337 0.0553 20
Lead	0.04956	0.00500	0.05	0.000045	99.0	80 - 120	0.0496 0.0887 20
Manganese	0.3068	0.00500	0.05	0.2509	112	80 - 120	0.3063 0.181 20 O
Nickel	0.04522	0.00500	0.05	0.000904	88.6	80 - 120	0.04526 0.0884 20
Zinc	0.05141	0.00500	0.05	0.002647	97.5	80 - 120	0.0509 1 20
MSD	Sample ID: HS15100026-01MSD			Units: mg/L		Analysis Date: 07-Oct-2015 13:52	
Client ID:		Run ID: ICPMS05_262638		SeqNo: 3452580	PrepDate: 02-Oct-2015	DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value %RPD Limit Qual
Boron	0.7946	0.0500	0.5	0.1903	121	80 - 120	0.7771 2.24 20 S

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** ALS  
**Project:** San Jacinto River Coalition (b) (6)  
**WorkOrder:** HS15100056

**QC BATCH REPORT**

Batch ID: 97670		Instrument: ICPMS05		Method: SW6020			
PDS	Sample ID: HS15100026-01BS			Units: mg/L		Analysis Date: 06-Oct-2015 14:50	
Client ID:		Run ID: ICPMS05_262534		SeqNo: 3451088	PrepDate: 02-Oct-2015	DF: 10	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value %RPD Limit Qual
Barium	2.457	0.0500	1	1.56	89.7	75 - 125	
PDS	Sample ID: HS15100026-01BS			Units: mg/L		Analysis Date: 07-Oct-2015 13:55	
Client ID:		Run ID: ICPMS05_262638		SeqNo: 3452581	PrepDate: 02-Oct-2015	DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value %RPD Limit Qual
Boron	1.105	0.0500	0.5	0.1903	183	75 - 125	S
PDS	Sample ID: HS15100026-01BS			Units: mg/L		Analysis Date: 06-Oct-2015 14:03	
Client ID:		Run ID: ICPMS05_262534		SeqNo: 3450955	PrepDate: 02-Oct-2015	DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value %RPD Limit Qual
Cadmium	0.09634	0.00200	0.1	0	96.3	75 - 125	
Chromium	0.09344	0.00500	0.1	0	93.4	75 - 125	
Copper	0.08399	0.00500	0.1	0	84.0	75 - 125	
Lead	0.09595	0.00500	0.1	0	96.0	75 - 125	
Manganese	0.3606	0.00500	0.1	0.2509	110	75 - 125	
Nickel	0.0874	0.00500	0.1	0.000904	86.5	75 - 125	
Zinc	0.09538	0.00500	0.1	0.002647	92.7	75 - 125	
SD	Sample ID: HS15100026-01 DIL SX			Units: mg/L		Analysis Date: 06-Oct-2015 14:47	
Client ID:		Run ID: ICPMS05_262534		SeqNo: 3451087	PrepDate: 02-Oct-2015	DF: 50	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value %D Limit Qual
Barium	1.539	0.250				1.56	1.34 10
SD	Sample ID: HS15100026-01 DIL SX			Units: mg/L		Analysis Date: 07-Oct-2015 13:41	
Client ID:		Run ID: ICPMS05_262638		SeqNo: 3452576	PrepDate: 02-Oct-2015	DF: 5	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value %D Limit Qual
Boron	0.2433	0.250				0.1903	0 10 J

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** ALS  
**Project:** San Jacinto River Coalition (b) (6)  
**WorkOrder:** HS15100056

**QC BATCH REPORT**

Batch ID: 97670

Instrument: ICPMS05

Method: SW6020

SD	Sample ID:	HS15100026-01 DIL SX		Units:	mg/L	Analysis Date: 06-Oct-2015 13:55			
Client ID:		Run ID: ICPMS05_262534		SeqNo:	3450952	PrepDate:	02-Oct-2015	DF:	5
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%D	%D Limit Qual
Cadmium	U	0.0100					0.000002	0	10
Chromium	U	0.0250					0.000272	0	10
Copper	U	0.0250					-0.00113	0	10
Lead	U	0.0250					0.000045	0	10
Manganese	0.2571	0.0250					0.2509	2.46	10
Nickel	U	0.0250					0.000904	0	10
Zinc	U	0.0250					0.002647	0	10

The following samples were analyzed in this batch: HS15100056-02

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** ALS  
**Project:** San Jacinto River Coalition (b) (6)  
**WorkOrder:** HS15100056

**QC BATCH REPORT**

Batch ID: 97685	Instrument: HG03	Method: SW7470
-----------------	------------------	----------------

MLBK	Sample ID: MBLK-97685	Units: mg/L	Analysis Date: 02-Oct-2015 13:47					
Client ID:	Run ID: HG03_262419	SeqNo: 3448423	PrepDate: 02-Oct-2015	DF: 1	SPK Ref Value	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Analyte	Result	PQL	SPK Val	%REC				
Mercury	U	0.000200						

LCS	Sample ID: LCS-97685	Units: mg/L	Analysis Date: 02-Oct-2015 13:49					
Client ID:	Run ID: HG03_262419	SeqNo: 3448424	PrepDate: 02-Oct-2015	DF: 1	SPK Ref Value	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Analyte	Result	PQL	SPK Val	%REC				
Mercury	0.00522	0.000200	0.005	0	104	80 - 124		

MS	Sample ID: HS15100026-01MS	Units: mg/L	Analysis Date: 02-Oct-2015 13:52					
Client ID:	Run ID: HG03_262419	SeqNo: 3448426	PrepDate: 02-Oct-2015	DF: 1	SPK Ref Value	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Analyte	Result	PQL	SPK Val	%REC				
Mercury	0.00539	0.000200	0.005	-0.000006	108	80 - 124		

MSD	Sample ID: HS15100026-01MSD	Units: mg/L	Analysis Date: 02-Oct-2015 13:54					
Client ID:	Run ID: HG03_262419	SeqNo: 3448427	PrepDate: 02-Oct-2015	DF: 1	SPK Ref Value	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Analyte	Result	PQL	SPK Val	%REC				
Mercury	0.00529	0.000200	0.005	-0.000006	106	80 - 124	0.00539	1.87 20

The following samples were analyzed in this batch: HS15100056-02

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** ALS  
**Project:** San Jacinto River Coalition (b) (6)  
**WorkOrder:** HS15100056

**QC BATCH REPORT**

Batch ID: 97793		Instrument: SV-6		Method: SW8270			
MLBK	Sample ID: MBLK-97793			Units: ug/L	Analysis Date: 08-Oct-2015 11:31		
Client ID:		Run ID: SV-6_262902		SeqNo: 3457698	PrepDate: 06-Oct-2015	DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value %RPD
1,1'-Biphenyl	U	0.20					
2,4,5-Trichlorophenol	U	0.20					
2,4,6-Trichlorophenol	U	0.20					
2,4-Dichlorophenol	U	0.20					
2,4-Dimethylphenol	U	0.20					
2,4-Dinitrophenol	U	1.0					
2,4-Dinitrotoluene	U	0.20					
2,6-Dinitrotoluene	U	0.20					
2-Chloronaphthalene	U	0.20					
2-Chlorophenol	U	0.20					
2-Methylnaphthalene	U	0.10					
2-Methylphenol	U	0.20					
2-Nitroaniline	U	0.20					
2-Nitrophenol	U	0.20					
3&4-Methylphenol	U	0.20					
3,3'-Dichlorobenzidine	U	0.20					
3-Nitroaniline	U	0.20					
4,6-Dinitro-2-methylphenol	U	0.20					
4-Bromophenyl phenyl ether	U	0.20					
4-Chloro-3-methylphenol	U	0.20					
4-Chloroaniline	U	0.20					
4-Chlorophenyl phenyl ether	U	0.20					
4-Nitroaniline	U	0.20					
4-Nitrophenol	U	1.0					
Acenaphthene	U	0.10					
Acenaphthylene	U	0.10					
Acetophenone	U	0.20					
Anthracene	U	0.10					
Atrazine	U	0.20					
Benz(a)anthracene	U	0.10					
Benzaldehyde	U	0.20					
Benzo(a)pyrene	U	0.10					
Benzo(b)fluoranthene	U	0.10					
Benzo(g,h,i)perylene	U	0.10					

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** ALS  
**Project:** San Jacinto River Coalition (b) (6)  
**WorkOrder:** HS15100056

**QC BATCH REPORT**

Batch ID: 97793		Instrument: SV-6		Method: SW8270			
MLBK	Sample ID: MBLK-97793			Units: ug/L	Analysis Date: 08-Oct-2015 11:31		
Client ID:		Run ID: SV-6_262902		SeqNo: 3457698	PrepDate: 06-Oct-2015	DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value %RPD
Benzo(k)fluoranthene	U	0.10					
Bis(2-chloroethoxy)methane	U	0.20					
Bis(2-chloroethyl)ether	U	0.20					
Bis(2-chloroisopropyl)ether	U	0.20					
Bis(2-ethylhexyl)phthalate	U	0.20					
Butyl benzyl phthalate	U	0.20					
Caprolactam	U	0.20					
Carbazole	U	0.20					
Chrysene	U	0.10					
Dibenz(a,h)anthracene	U	0.10					
Dibenzofuran	U	0.10					
Diethyl phthalate	U	0.20					
Dimethyl phthalate	U	0.20					
Di-n-butyl phthalate	U	0.20					
Di-n-octyl phthalate	U	0.20					
Fluoranthene	U	0.10					
Fluorene	U	0.10					
Hexachlorobenzene	U	0.20					
Hexachlorobutadiene	U	0.20					
Hexachlorocyclopentadiene	U	0.20					
Hexachloroethane	U	0.20					
Indeno(1,2,3-cd)pyrene	U	0.10					
Isophorone	U	0.20					
Naphthalene	U	0.10					
Nitrobenzene	U	0.20					
N-Nitrosodi-n-propylamine	U	0.20					
N-Nitrosodiphenylamine	U	0.20					
Pentachlorophenol	U	0.20					
Phenanthrene	U	0.10					
Phenol	U	0.20					
Pyrene	U	0.10					
Surr: 2,4,6-Tribromophenol	3.221	0.20	5	0	64.4	34 - 129	
Surr: 2-Fluorobiphenyl	3.278	0.20	5	0	65.6	40 - 125	
Surr: 2-Fluorophenol	2.748	0.20	5	0	55.0	20 - 120	

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** ALS  
**Project:** San Jacinto River Coalition (b) (6)  
**WorkOrder:** HS15100056

**QC BATCH REPORT**

**Batch ID:** 97793      **Instrument:** SV-6      **Method:** SW8270

MBLK		Sample ID: MBLK-97793		Units: ug/L		Analysis Date: 08-Oct-2015 11:31			
Client ID:		Run ID: SV-6_262902		SeqNo: 3457698		PrepDate: 06-Oct-2015		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Surr: 4-Terphenyl-d14	3.526	0.20	5	0	70.5	40 - 135			
Surr: Nitrobenzene-d5	3.309	0.20	5	0	66.2	41 - 120			
Surr: Phenol-d6	3.252	0.20	5	0	65.0	20 - 120			

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** ALS  
**Project:** San Jacinto River Coalition (b) (6)  
**WorkOrder:** HS15100056

**QC BATCH REPORT**

Batch ID: 97793		Instrument: SV-6		Method: SW8270			
LCS	Sample ID: LCS-97793	Units: ug/L		Analysis Date: 08-Oct-2015 11:50			
Client ID:	Run ID: SV-6_262902			SeqNo: 3457699	PrepDate: 06-Oct-2015	DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value %RPD
1,1'-Biphenyl	3.338	0.20	5	0	66.8	45 - 125	
2,4,5-Trichlorophenol	3.715	0.20	5	0	74.3	46 - 120	
2,4,6-Trichlorophenol	3.375	0.20	5	0	67.5	42 - 120	
2,4-Dichlorophenol	3.66	0.20	5	0	73.2	49 - 120	
2,4-Dimethylphenol	3.255	0.20	5	0	65.1	35 - 120	
2,4-Dinitrophenol	1.253	1.0	5	0	25.1	15 - 120	
2,4-Dinitrotoluene	3.46	0.20	5	0	69.2	50 - 122	
2,6-Dinitrotoluene	3.549	0.20	5	0	71.0	50 - 120	
2-Chloronaphthalene	3.438	0.20	5	0	68.8	50 - 120	
2-Chlorophenol	3.462	0.20	5	0	69.2	40 - 120	
2-Methylnaphthalene	3.5	0.10	5	0	70.0	50 - 120	
2-Methylphenol	3.779	0.20	5	0	75.6	45 - 120	
2-Nitroaniline	4.071	0.20	5	0	81.4	28 - 139	
2-Nitrophenol	3.155	0.20	5	0	63.1	40 - 120	
3&4-Methylphenol	3.869	0.20	5	0	77.4	35 - 120	
3,3'-Dichlorobenzidine	3.684	0.20	5	0	73.7	15 - 120	
3-Nitroaniline	3.441	0.20	5	0	68.8	30 - 120	
4,6-Dinitro-2-methylphenol	2.166	0.20	5	0	43.3	25 - 121	
4-Bromophenyl phenyl ether	3.828	0.20	5	0	76.6	45 - 120	
4-Chloro-3-methylphenol	3.602	0.20	5	0	72.0	47 - 120	
4-Chloroaniline	3.347	0.20	5	0	66.9	20 - 120	
4-Chlorophenyl phenyl ether	3.534	0.20	5	0	70.7	50 - 120	
4-Nitroaniline	3.537	0.20	5	0	70.7	30 - 133	
4-Nitrophenol	3.042	1.0	5	0	60.8	30 - 130	
Acenaphthene	3.092	0.10	5	0	61.8	45 - 120	
Acenaphthylene	3.461	0.10	5	0	69.2	47 - 120	
Acetophenone	3.17	0.20	5	0	63.4	40 - 120	
Anthracene	3.534	0.10	5	0	70.7	45 - 120	
Atrazine	3.67	0.20	5	0	73.4	40 - 130	
Benz(a)anthracene	3.753	0.10	5	0	75.1	40 - 120	
Benzaldehyde	0.8773	0.20	5	0	17.5	15 - 120	
Benzo(a)pyrene	3.618	0.10	5	0	72.4	45 - 120	
Benzo(b)fluoranthene	3.848	0.10	5	0	77.0	50 - 120	
Benzo(g,h,i)perylene	3.694	0.10	5	0	73.9	42 - 127	

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** ALS  
**Project:** San Jacinto River Coalition (b) (6)  
**WorkOrder:** HS15100056

**QC BATCH REPORT**

Batch ID: 97793		Instrument: SV-6		Method: SW8270			
LCS	Sample ID: LCS-97793	Units: ug/L		Analysis Date: 08-Oct-2015 11:50			
Client ID:	Run ID: SV-6_262902			SeqNo: 3457699	PrepDate: 06-Oct-2015	DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value %RPD
Benzo(k)fluoranthene	3.534	0.10	5	0	70.7	45 - 127	
Bis(2-chloroethoxy)methane	3.463	0.20	5	0	69.3	45 - 120	
Bis(2-chloroethyl)ether	3.375	0.20	5	0	67.5	37 - 121	
Bis(2-chloroisopropyl)ether	3.498	0.20	5	0	70.0	40 - 120	
Bis(2-ethylhexyl)phthalate	3.642	0.20	5	0	72.8	40 - 139	
Butyl benzyl phthalate	3.675	0.20	5	0	73.5	47 - 123	
Caprolactam	3.729	0.20	5	0	74.6	35 - 134	
Carbazole	3.547	0.20	5	0	70.9	42 - 128	
Chrysene	3.554	0.10	5	0	71.1	43 - 120	
Dibenz(a,h)anthracene	3.485	0.10	5	0	69.7	45 - 125	
Dibenzofuran	3.604	0.10	5	0	72.1	50 - 120	
Diethyl phthalate	3.528	0.20	5	0	70.6	41 - 120	
Dimethyl phthalate	3.295	0.20	5	0	65.9	40 - 122	
Di-n-butyl phthalate	3.596	0.20	5	0	71.9	45 - 123	
Di-n-octyl phthalate	3.45	0.20	5	0	69.0	45 - 129	
Fluoranthene	3.659	0.10	5	0	73.2	45 - 125	
Fluorene	3.537	0.10	5	0	70.7	49 - 120	
Hexachlorobenzene	3.794	0.20	5	0	75.9	48 - 120	
Hexachlorobutadiene	3.5	0.20	5	0	70.0	40 - 120	
Hexachlorocyclopentadiene	2.819	0.20	5	0	56.4	34 - 136	
Hexachloroethane	3.4	0.20	5	0	68.0	40 - 120	
Indeno(1,2,3-cd)pyrene	3.624	0.10	5	0	72.5	41 - 128	
Isophorone	3.562	0.20	5	0	71.2	40 - 121	
Naphthalene	3.567	0.10	5	0	71.3	45 - 120	
Nitrobenzene	3.583	0.20	5	0	71.7	44 - 120	
N-Nitrosodi-n-propylamine	3.844	0.20	5	0	76.9	40 - 120	
N-Nitrosodiphenylamine	3.716	0.20	5	0	74.3	40 - 125	
Pentachlorophenol	2.631	0.20	5	0	52.6	19 - 121	
Phenanthrene	3.509	0.10	5	0	70.2	45 - 121	
Phenol	3.035	0.20	5	0	60.7	20 - 124	
Pyrene	3.623	0.10	5	0	72.5	40 - 130	
Surr: 2,4,6-Tribromophenol	3.919	0.20	5	0	78.4	34 - 129	
Surr: 2-Fluorobiphenyl	3.614	0.20	5	0	72.3	40 - 125	
Surr: 2-Fluorophenol	2.991	0.20	5	0	59.8	20 - 120	

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** ALS  
**Project:** San Jacinto River Coalition (b) (6)  
**WorkOrder:** HS15100056

**QC BATCH REPORT**

Batch ID: 97793		Instrument: SV-6		Method: SW8270			
LCS	Sample ID: LCS-97793			Units: ug/L		Analysis Date: 08-Oct-2015 11:50	
Client ID:		Run ID: SV-6_262902		SeqNo: 3457699	PrepDate: 06-Oct-2015	DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value %RPD
Surr: 4-Terphenyl-d14	3.881	0.20	5	0	77.6	40 - 135	
Surr: Nitrobenzene-d5	3.577	0.20	5	0	71.5	41 - 120	
Surr: Phenol-d6	3.57	0.20	5	0	71.4	20 - 120	

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** ALS  
**Project:** San Jacinto River Coalition (b) (6)  
**WorkOrder:** HS15100056

**QC BATCH REPORT**

Batch ID: 97793		Instrument: SV-6		Method: SW8270					
LCSD	Sample ID: LCSD-97793			Units: ug/L		Analysis Date: 08-Oct-2015 12:09			
Client ID:		Run ID: SV-6_262902		SeqNo: 3457700		PrepDate: 06-Oct-2015		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
1,1'-Biphenyl	3.405	0.20	5	0	68.1	45 - 125	3.338	1.98	20
2,4,5-Trichlorophenol	3.933	0.20	5	0	78.7	46 - 120	3.715	5.69	20
2,4,6-Trichlorophenol	3.622	0.20	5	0	72.4	42 - 120	3.375	7.08	20
2,4-Dichlorophenol	3.698	0.20	5	0	74.0	49 - 120	3.66	1.05	20
2,4-Dimethylphenol	3.312	0.20	5	0	66.2	35 - 120	3.255	1.75	20
2,4-Dinitrophenol	1.658	1.0	5	0	33.2	15 - 120	1.253	27.8	50
2,4-Dinitrotoluene	3.654	0.20	5	0	73.1	50 - 122	3.46	5.46	20
2,6-Dinitrotoluene	3.696	0.20	5	0	73.9	50 - 120	3.549	4.05	20
2-Chloronaphthalene	3.578	0.20	5	0	71.6	50 - 120	3.438	4	20
2-Chlorophenol	3.633	0.20	5	0	72.7	40 - 120	3.462	4.83	20
2-Methylnaphthalene	3.612	0.10	5	0	72.2	50 - 120	3.5	3.13	20
2-Methylphenol	3.948	0.20	5	0	79.0	45 - 120	3.779	4.37	20
2-Nitroaniline	4.205	0.20	5	0	84.1	28 - 139	4.071	3.22	20
2-Nitrophenol	3.249	0.20	5	0	65.0	40 - 120	3.155	2.95	20
3&4-Methylphenol	4.023	0.20	5	0	80.5	35 - 120	3.869	3.89	20
3,3'-Dichlorobenzidine	3.752	0.20	5	0	75.0	15 - 120	3.684	1.84	20
3-Nitroaniline	3.487	0.20	5	0	69.7	30 - 120	3.441	1.34	20
4,6-Dinitro-2-methylphenol	2.114	0.20	5	0	42.3	25 - 121	2.166	2.4	30
4-Bromophenyl phenyl ether	3.86	0.20	5	0	77.2	45 - 120	3.828	0.855	20
4-Chloro-3-methylphenol	3.655	0.20	5	0	73.1	47 - 120	3.602	1.45	20
4-Chloroaniline	3.568	0.20	5	0	71.4	20 - 120	3.347	6.39	20
4-Chlorophenyl phenyl ether	3.574	0.20	5	0	71.5	50 - 120	3.534	1.11	20
4-Nitroaniline	3.606	0.20	5	0	72.1	30 - 133	3.537	1.95	20
4-Nitrophenol	3.772	1.0	5	0	75.4	30 - 130	3.042	21.4	20
Acenaphthene	3.18	0.10	5	0	63.6	45 - 120	3.092	2.79	20
Acenaphthylene	3.557	0.10	5	0	71.1	47 - 120	3.461	2.73	20
Acetophenone	3.239	0.20	5	0	64.8	40 - 120	3.17	2.14	20
Anthracene	3.533	0.10	5	0	70.7	45 - 120	3.534	0.0213	20
Atrazine	3.685	0.20	5	0	73.7	40 - 130	3.67	0.401	20
Benz(a)anthracene	3.853	0.10	5	0	77.1	40 - 120	3.753	2.61	20
Benzaldehyde	0.9176	0.20	5	0	18.4	15 - 120	0.8773	4.49	30
Benzo(a)pyrene	3.755	0.10	5	0	75.1	45 - 120	3.618	3.7	20
Benzo(b)fluoranthene	3.762	0.10	5	0	75.2	50 - 120	3.848	2.26	20
Benzo(g,h,i)perylene	3.765	0.10	5	0	75.3	42 - 127	3.694	1.92	20

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** ALS  
**Project:** San Jacinto River Coalition (b) (6)  
**WorkOrder:** HS15100056

**QC BATCH REPORT**

Batch ID: 97793		Instrument: SV-6		Method: SW8270					
LCSD	Sample ID: LCSD-97793	Units: ug/L			Analysis Date: 08-Oct-2015 12:09				
Client ID:	Run ID: SV-6_262902	SeqNo: 3457700		PrepDate: 06-Oct-2015	DF: 1				
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Benzo(k)fluoranthene	3.385	0.10	5	0	67.7	45 - 127	3.534	4.29	20
Bis(2-chloroethoxy)methane	3.578	0.20	5	0	71.6	45 - 120	3.463	3.28	20
Bis(2-chloroethyl)ether	3.48	0.20	5	0	69.6	37 - 121	3.375	3.06	20
Bis(2-chloroisopropyl)ether	3.668	0.20	5	0	73.4	40 - 120	3.498	4.74	20
Bis(2-ethylhexyl)phthalate	3.787	0.20	5	0	75.7	40 - 139	3.642	3.9	20
Butyl benzyl phthalate	3.822	0.20	5	0	76.4	47 - 123	3.675	3.91	20
Caprolactam	3.964	0.20	5	0	79.3	35 - 134	3.729	6.1	20
Carbazole	3.53	0.20	5	0	70.6	42 - 128	3.547	0.5	20
Chrysene	3.674	0.10	5	0	73.5	43 - 120	3.554	3.31	20
Dibenz(a,h)anthracene	3.398	0.10	5	0	68.0	45 - 125	3.485	2.52	20
Dibenzofuran	3.64	0.10	5	0	72.8	50 - 120	3.604	0.968	20
Diethyl phthalate	3.607	0.20	5	0	72.1	41 - 120	3.528	2.2	20
Dimethyl phthalate	3.356	0.20	5	0	67.1	40 - 122	3.295	1.82	20
Di-n-butyl phthalate	3.66	0.20	5	0	73.2	45 - 123	3.596	1.78	20
Di-n-octyl phthalate	3.585	0.20	5	0	71.7	45 - 129	3.45	3.82	20
Fluoranthene	3.701	0.10	5	0	74.0	45 - 125	3.659	1.13	20
Fluorene	3.589	0.10	5	0	71.8	49 - 120	3.537	1.46	20
Hexachlorobenzene	3.739	0.20	5	0	74.8	48 - 120	3.794	1.45	20
Hexachlorobutadiene	3.579	0.20	5	0	71.6	40 - 120	3.5	2.25	20
Hexachlorocyclopentadiene	3.084	0.20	5	0	61.7	34 - 136	2.819	8.97	20
Hexachloroethane	3.577	0.20	5	0	71.5	40 - 120	3.4	5.08	20
Indeno(1,2,3-cd)pyrene	3.911	0.10	5	0	78.2	41 - 128	3.624	7.62	20
Isophorone	3.643	0.20	5	0	72.9	40 - 121	3.562	2.26	20
Naphthalene	3.673	0.10	5	0	73.5	45 - 120	3.567	2.92	20
Nitrobenzene	3.69	0.20	5	0	73.8	44 - 120	3.583	2.93	20
N-Nitrosodi-n-propylamine	4.002	0.20	5	0	80.0	40 - 120	3.844	4.04	20
N-Nitrosodiphenylamine	3.73	0.20	5	0	74.6	40 - 125	3.716	0.38	20
Pentachlorophenol	2.793	0.20	5	0	55.9	19 - 121	2.631	5.99	20
Phenanthrene	3.546	0.10	5	0	70.9	45 - 121	3.509	1.04	20
Phenol	3.723	0.20	5	0	74.5	20 - 124	3.035	20.3	20 R
Pyrene	3.681	0.10	5	0	73.6	40 - 130	3.623	1.57	20
Surr: 2,4,6-Tribromophenol	3.986	0.20	5	0	79.7	34 - 129	3.919	1.71	20
Surr: 2-Fluorobiphenyl	3.616	0.20	5	0	72.3	40 - 125	3.614	0.0622	20
Surr: 2-Fluorophenol	3.584	0.20	5	0	71.7	20 - 120	2.991	18	20

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** ALS  
**Project:** San Jacinto River Coalition (b) (6)  
**WorkOrder:** HS15100056

**QC BATCH REPORT**

**Batch ID:** 97793      **Instrument:** SV-6      **Method:** SW8270

LCSD	Sample ID:	Units: ug/L		Analysis Date: 08-Oct-2015 12:09					
Client ID:	Run ID:	SeqNo: 3457700	PrepDate: 06-Oct-2015	DF: 1					
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Surr: 4-Terphenyl-d14	3.92	0.20	5	0	78.4	40 - 135	3.881	0.995	20
Surr: Nitrobenzene-d5	3.534	0.20	5	0	70.7	41 - 120	3.577	1.21	20
Surr: Phenol-d6	3.69	0.20	5	0	73.8	20 - 120	3.57	3.32	20

The following samples were analyzed in this batch: HS15100056-01

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** ALS  
**Project:** San Jacinto River Coalition (b) (6)  
**WorkOrder:** HS15100056

**QC BATCH REPORT**

Batch ID: R262646		Instrument: VOA4		Method: SW8260				
MBLK	Sample ID: VBLKW-151007	Units: ug/L		Analysis Date: 07-Oct-2015 12:01				
Client ID:	Run ID: VOA4_262646	SeqNo: 3452439	PrepDate:	DF: 1				
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
1,1,1-Trichloroethane	U	1.0						
1,1,2,2-Tetrachloroethane	U	1.0						
1,1,2-Trichlor-1,2,2-trifluoroethane	U	1.0						
1,1,2-Trichloroethane	U	1.0						
1,1-Dichloroethane	U	1.0						
1,1-Dichloroethene	U	1.0						
1,2,4-Trichlorobenzene	U	1.0						
1,2-Dibromo-3-chloropropane	U	1.0						
1,2-Dibromoethane	U	1.0						
1,2-Dichlorobenzene	U	1.0						
1,2-Dichloroethane	U	1.0						
1,2-Dichloropropane	U	1.0						
1,3-Dichlorobenzene	U	1.0						
1,4-Dichlorobenzene	U	1.0						
2-Butanone	U	2.0						
2-Hexanone	U	2.0						
4-Methyl-2-pentanone	U	2.0						
Acetone	U	2.0						
Benzene	U	1.0						
Bromodichloromethane	U	1.0						
Bromoform	U	1.0						
Bromomethane	U	1.0						
Carbon disulfide	U	2.0						
Carbon tetrachloride	U	1.0						
Chlorobenzene	U	1.0						
Chloroethane	U	1.0						
Chloroform	U	1.0						
Chloromethane	U	1.0						
cis-1,2-Dichloroethene	U	1.0						
cis-1,3-Dichloropropene	U	1.0						
Cyclohexane	U	1.0						
Dibromochloromethane	U	1.0						
Dichlorodifluoromethane	U	1.0						
Ethylbenzene	U	1.0						

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** ALS  
**Project:** San Jacinto River Coalition (b) (6)  
**WorkOrder:** HS15100056

**QC BATCH REPORT**

**Batch ID:** R262646      **Instrument:** VOA4      **Method:** SW8260

MBLK	Sample ID:	VBLKW-151007	Units:	ug/L	Analysis Date: 07-Oct-2015 12:01			
Client ID:	Run ID:	VOA4_262646	SeqNo:	3452439	PrepDate:	DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Isopropylbenzene	U	1.0						
m,p-Xylene	U	2.0						
Methyl acetate	U	1.0						
Methyl tert-butyl ether	U	1.0						
Methylcyclohexane	U	1.0						
Methylene chloride	U	2.0						
o-Xylene	U	1.0						
Styrene	U	1.0						
Tetrachloroethene	U	1.0						
Toluene	U	1.0						
trans-1,2-Dichloroethene	U	1.0						
trans-1,3-Dichloropropene	U	1.0						
Trichloroethene	U	1.0						
Trichlorofluoromethane	U	1.0						
Vinyl chloride	U	1.0						
Xylenes, Total	U	3.0						
Surr: 1,2-Dichloroethane-d4	46.81	1.0	50	0	93.6	71 - 125		
Surr: 4-Bromofluorobenzene	51.6	1.0	50	0	103	70 - 125		
Surr: Dibromofluoromethane	46.57	1.0	50	0	93.1	74 - 125		
Surr: Toluene-d8	57.44	1.0	50	0	115	75 - 125		

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** ALS  
**Project:** San Jacinto River Coalition (b) (6)  
**WorkOrder:** HS15100056

**QC BATCH REPORT**

Batch ID: R262646		Instrument: VOA4		Method: SW8260			
LCS	Sample ID: VLCSW-141007	Units: ug/L		Analysis Date: 07-Oct-2015 11:11			
Client ID:	Run ID: VOA4_262646	SeqNo: 3452438		PrepDate:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value %RPD
1,1,1-Trichloroethane	47.49	1.0	50	0	95.0	75 - 130	
1,1,2,2-Tetrachloroethane	52.55	1.0	50	0	105	74 - 123	
1,1,2-Trichlor-1,2,2-trifluoroethane	48.8	1.0	50	0	97.6	70 - 130	
1,1,2-Trichloroethane	50.98	1.0	50	0	102	80 - 120	
1,1-Dichloroethane	45.1	1.0	50	0	90.2	76 - 120	
1,1-Dichloroethene	42.98	1.0	50	0	86.0	75 - 130	
1,2,4-Trichlorobenzene	55.71	1.0	50	0	111	75 - 126	
1,2-Dibromo-3-chloropropane	57.45	1.0	50	0	115	65 - 125	
1,2-Dibromoethane	57.11	1.0	50	0	114	80 - 121	
1,2-Dichlorobenzene	53.1	1.0	50	0	106	80 - 120	
1,2-Dichloroethane	47.6	1.0	50	0	95.2	76 - 120	
1,2-Dichloropropane	45.52	1.0	50	0	91.0	80 - 120	
1,3-Dichlorobenzene	52.07	1.0	50	0	104	80 - 120	
1,4-Dichlorobenzene	49.49	1.0	50	0	99.0	80 - 120	
2-Butanone	108.3	2.0	100	0	108	60 - 140	
2-Hexanone	130	2.0	100	0	130	60 - 131	
4-Methyl-2-pentanone	124.1	2.0	100	0	124	60 - 135	
Acetone	103.7	2.0	100	0	104	60 - 140	
Benzene	45.01	1.0	50	0	90.0	80 - 120	
Bromodichloromethane	46.48	1.0	50	0	93.0	75 - 125	
Bromoform	58.03	1.0	50	0	116	70 - 130	
Bromomethane	44.38	1.0	50	0	88.8	60 - 140	
Carbon disulfide	91.78	2.0	100	0	91.8	70 - 130	
Carbon tetrachloride	45.56	1.0	50	0	91.1	75 - 125	
Chlorobenzene	49.35	1.0	50	0	98.7	80 - 120	
Chloroethane	41.51	1.0	50	0	83.0	70 - 130	
Chloroform	44.72	1.0	50	0	89.4	70 - 130	
Chloromethane	43.71	1.0	50	0	87.4	65 - 130	
cis-1,2-Dichloroethene	44.19	1.0	50	0	88.4	75 - 125	
cis-1,3-Dichloropropene	53.53	1.0	50	0	107	79 - 125	
Cyclohexane	45.41	1.0	50	0	90.8	70 - 130	
Dibromochloromethane	55.34	1.0	50	0	111	70 - 130	
Dichlorodifluoromethane	48.53	1.0	50	0	97.1	60 - 140	
Ethylbenzene	51.72	1.0	50	0	103	80 - 120	

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** ALS  
**Project:** San Jacinto River Coalition (b) (6)  
**WorkOrder:** HS15100056

**QC BATCH REPORT**

Batch ID: R262646		Instrument: VOA4		Method: SW8260			
LCS	Sample ID: VLCSW-141007	Units: ug/L		Analysis Date: 07-Oct-2015 11:11			
Client ID:	Run ID: VOA4_262646	SeqNo: 3452438		PrepDate:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value %RPD
Isopropylbenzene	54.76	1.0	50	0	110	75 - 130	
m,p-Xylene	104.9	2.0	100	0	105	80 - 120	
Methyl acetate	49.88	1.0	50	0	99.8	76 - 122	
Methyl tert-butyl ether	50.6	1.0	50	0	101	70 - 130	
Methylcyclohexane	46.51	1.0	50	0	93.0	70 - 126	
Methylene chloride	44.73	2.0	50	0	89.5	65 - 133	
o-Xylene	51.63	1.0	50	0	103	80 - 120	
Styrene	55.22	1.0	50	0	110	78 - 122	
Tetrachloroethene	52.34	1.0	50	0	105	75 - 130	
Toluene	50.27	1.0	50	0	101	75 - 121	
trans-1,2-Dichloroethene	47.21	1.0	50	0	94.4	75 - 125	
trans-1,3-Dichloropropene	44.99	1.0	50	0	90.0	76 - 125	
Trichloroethene	45.08	1.0	50	0	90.2	71 - 125	
Trichlorofluoromethane	46.55	1.0	50	0	93.1	67 - 132	
Vinyl chloride	44.7	1.0	50	0	89.4	70 - 135	
Xylenes, Total	156.5	3.0	150	0	104	79 - 124	
Surr: 1,2-Dichloroethane-d4	44.91	1.0	50	0	89.8	71 - 125	
Surr: 4-Bromofluorobenzene	51.49	1.0	50	0	103	70 - 125	
Surr: Dibromofluoromethane	45.31	1.0	50	0	90.6	74 - 125	
Surr: Toluene-d8	53.93	1.0	50	0	108	75 - 125	

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** ALS  
**Project:** San Jacinto River Coalition (b) (6)  
**WorkOrder:** HS15100056

**QC BATCH REPORT**

Batch ID: R262646		Instrument: VOA4		Method: SW8260			
MS	Sample ID: HS15100209-02MS	Units: ug/L		Analysis Date: 07-Oct-2015 14:34			
Client ID:	Run ID: VOA4_262646	SeqNo: 3452850		PrepDate:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value %RPD
1,1,1-Trichloroethane	51.33	1.0	50	0	103	75 - 130	
1,1,2,2-Tetrachloroethane	54.37	1.0	50	0	109	74 - 123	
1,1,2-Trichlor-1,2,2-trifluoroethane	54.32	1.0	50	0	109	70 - 130	
1,1,2-Trichloroethane	50.8	1.0	50	0	102	80 - 120	
1,1-Dichloroethane	48.19	1.0	50	0	96.4	76 - 120	
1,1-Dichloroethene	49.68	1.0	50	0	99.4	75 - 130	
1,2,4-Trichlorobenzene	54.83	1.0	50	0	110	75 - 126	
1,2-Dibromo-3-chloropropane	56.79	1.0	50	0	114	65 - 125	
1,2-Dibromoethane	56.47	1.0	50	0	113	80 - 121	
1,2-Dichlorobenzene	52.57	1.0	50	0	105	80 - 120	
1,2-Dichloroethane	50.11	1.0	50	0	100	76 - 120	
1,2-Dichloropropane	48.1	1.0	50	0	96.2	80 - 120	
1,3-Dichlorobenzene	53.95	1.0	50	0	108	80 - 120	
1,4-Dichlorobenzene	50.36	1.0	50	0	101	80 - 120	
2-Butanone	112.1	2.0	100	0	112	60 - 140	
2-Hexanone	132.9	2.0	100	0	133	60 - 131	S
4-Methyl-2-pentanone	129	2.0	100	0	129	60 - 135	
Acetone	102.5	2.0	100	0	103	60 - 140	
Benzene	47.84	1.0	50	0	95.7	80 - 120	
Bromodichloromethane	48.69	1.0	50	0	97.4	75 - 125	
Bromoform	58.79	1.0	50	0	118	70 - 130	
Bromomethane	48.24	1.0	50	0	96.5	60 - 140	
Carbon disulfide	105.1	2.0	100	0	105	70 - 130	
Carbon tetrachloride	50.62	1.0	50	0	101	79 - 120	
Chlorobenzene	51.07	1.0	50	0	102	80 - 120	
Chloroethane	46.35	1.0	50	0	92.7	70 - 130	
Chloroform	47.85	1.0	50	0	95.7	70 - 130	
Chloromethane	48.9	1.0	50	0	97.8	65 - 130	
cis-1,2-Dichloroethene	47.7	1.0	50	0	95.4	75 - 125	
cis-1,3-Dichloropropene	53.08	1.0	50	0	106	79 - 125	
Cyclohexane	52.43	1.0	50	0	105	70 - 130	
Dibromochloromethane	56.42	1.0	50	0	113	70 - 130	
Dichlorodifluoromethane	54.7	1.0	50	0	109	60 - 140	
Ethylbenzene	53.81	1.0	50	0	108	80 - 120	

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** ALS  
**Project:** San Jacinto River Coalition (b) (6)  
**WorkOrder:** HS15100056

**QC BATCH REPORT**

Batch ID: R262646

Instrument: VOA4

Method: SW8260

MS	Sample ID:	HS15100209-02MS		Units:	ug/L		Analysis Date: 07-Oct-2015 14:34		
Client ID:		Run ID: VOA4_262646		SeqNo:	3452850	PrepDate:	DF: 1		
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual
Isopropylbenzene		58.95	1.0	50	0	118	75 - 130		
m,p-Xylene		109.5	2.0	100	0	110	80 - 120		
Methyl acetate		54.77	1.0	50	0	110	76 - 122		
Methyl tert-butyl ether		54.19	1.0	50	4.203	100.0	70 - 130		
Methylcyclohexane		51.18	1.0	50	0	102	70 - 126		
Methylene chloride		45.9	2.0	50	0	91.8	65 - 133		
o-Xylene		54.18	1.0	50	0	108	80 - 120		
Styrene		56.72	1.0	50	0	113	78 - 122		
Tetrachloroethene		57.15	1.0	50	0	114	75 - 130		
Toluene		53.28	1.0	50	0	107	75 - 121		
trans-1,2-Dichloroethene		51.2	1.0	50	0	102	75 - 125		
trans-1,3-Dichloropropene		45.62	1.0	50	0	91.2	76 - 125		
Trichloroethene		48.44	1.0	50	0	96.9	71 - 125		
Trichlorofluoromethane		53.86	1.0	50	0	108	67 - 132		
Vinyl chloride		50	1.0	50	0	100	70 - 135		
Xylenes, Total		163.7	3.0	150	0	109	80 - 124		
Surr: 1,2-Dichloroethane-d4		48.42	1.0	50	0	96.8	71 - 125		
Surr: 4-Bromofluorobenzene		53.85	1.0	50	0	108	70 - 125		
Surr: Dibromofluoromethane		47.94	1.0	50	0	95.9	74 - 125		
Surr: Toluene-d8		55.19	1.0	50	0	110	75 - 125		

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** ALS  
**Project:** San Jacinto River Coalition (b) (6)  
**WorkOrder:** HS15100056

**QC BATCH REPORT**

Batch ID: R262646		Instrument: VOA4		Method: SW8260					
MSD	Sample ID: HS15100209-02MSD	Units: ug/L		Analysis Date: 07-Oct-2015 14:59					
Client ID:	Run ID: VOA4_262646	SeqNo: 3452851		PrepDate:		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
1,1,1-Trichloroethane	51.95	1.0	50	0	104	75 - 130	51.33	1.19	20
1,1,2,2-Tetrachloroethane	55.97	1.0	50	0	112	74 - 123	54.37	2.91	20
1,1,2-Trichlor-1,2,2-trifluoroethane	54.83	1.0	50	0	110	70 - 130	54.32	0.935	20
1,1,2-Trichloroethane	51.63	1.0	50	0	103	80 - 120	50.8	1.61	20
1,1-Dichloroethane	47.28	1.0	50	0	94.6	76 - 120	48.19	1.9	20
1,1-Dichloroethene	49.74	1.0	50	0	99.5	75 - 130	49.68	0.128	20
1,2,4-Trichlorobenzene	57.23	1.0	50	0	114	75 - 126	54.83	4.27	20
1,2-Dibromo-3-chloropropane	64.17	1.0	50	0	128	65 - 125	56.79	12.2	20
1,2-Dibromoethane	56.59	1.0	50	0	113	80 - 121	56.47	0.221	20
1,2-Dichlorobenzene	53.38	1.0	50	0	107	80 - 120	52.57	1.54	20
1,2-Dichloroethane	49.09	1.0	50	0	98.2	76 - 120	50.11	2.07	20
1,2-Dichloropropane	44.4	1.0	50	0	88.8	80 - 120	48.1	8.01	20
1,3-Dichlorobenzene	54.07	1.0	50	0	108	80 - 120	53.95	0.217	20
1,4-Dichlorobenzene	51	1.0	50	0	102	80 - 120	50.36	1.26	20
2-Butanone	113	2.0	100	0	113	60 - 140	112.1	0.77	20
2-Hexanone	138.1	2.0	100	0	138	60 - 131	132.9	3.86	20
4-Methyl-2-pentanone	131	2.0	100	0	131	60 - 135	129	1.48	20
Acetone	111.9	2.0	100	0	112	60 - 140	102.5	8.73	20
Benzene	46.05	1.0	50	0	92.1	80 - 120	47.84	3.83	20
Bromodichloromethane	46.51	1.0	50	0	93.0	75 - 125	48.69	4.58	20
Bromoform	60.87	1.0	50	0	122	70 - 130	58.79	3.49	20
Bromomethane	47.53	1.0	50	0	95.1	60 - 140	48.24	1.47	20
Carbon disulfide	104.8	2.0	100	0	105	70 - 130	105.1	0.317	20
Carbon tetrachloride	48.41	1.0	50	0	96.8	75 - 125	50.62	4.45	20
Chlorobenzene	50.91	1.0	50	0	102	80 - 120	51.07	0.3	20
Chloroethane	48.16	1.0	50	0	96.3	70 - 130	46.35	3.82	20
Chloroform	47.93	1.0	50	0	95.9	70 - 130	47.85	0.179	20
Chloromethane	48.14	1.0	50	0	96.3	65 - 130	48.9	1.57	20
cis-1,2-Dichloroethene	45.74	1.0	50	0	91.5	75 - 125	47.7	4.19	20
cis-1,3-Dichloropropene	51.69	1.0	50	0	103	79 - 125	53.08	2.65	20
Cyclohexane	52.02	1.0	50	0	104	70 - 130	52.43	0.774	20
Dibromochloromethane	56.97	1.0	50	0	114	70 - 130	56.42	0.969	20
Dichlorodifluoromethane	54.6	1.0	50	0	109	60 - 140	54.7	0.189	20
Ethylbenzene	54.7	1.0	50	0	109	80 - 120	53.81	1.64	20

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** ALS  
**Project:** San Jacinto River Coalition (b) (6)  
**WorkOrder:** HS15100056

**QC BATCH REPORT**

**Batch ID:** R262646      **Instrument:** VOA4      **Method:** SW8260

MSD	Sample ID:	HS15100209-02MSD		Units:	ug/L		Analysis Date: 07-Oct-2015 14:59			
Client ID:		Run ID: VOA4_262646		SeqNo:	3452851	PrepDate:	DF: 1			
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit Qual
Isopropylbenzene		58.58	1.0	50	0	117	75 - 130	58.95	0.632	20
m,p-Xylene		109.3	2.0	100	0	109	80 - 120	109.5	0.216	20
Methyl acetate		59.54	1.0	50	0	119	76 - 122	54.77	8.34	20
Methyl tert-butyl ether		56.71	1.0	50	4.203	105	70 - 130	54.19	4.53	20
Methylcyclohexane		48	1.0	50	0	96.0	70 - 126	51.18	6.42	20
Methylene chloride		45.5	2.0	50	0	91.0	65 - 133	45.9	0.877	20
o-Xylene		55.07	1.0	50	0	110	80 - 120	54.18	1.61	20
Styrene		56.22	1.0	50	0	112	78 - 122	56.72	0.884	20
Tetrachloroethene		56.81	1.0	50	0	114	75 - 130	57.15	0.59	20
Toluene		51.29	1.0	50	0	103	75 - 121	53.28	3.81	20
trans-1,2-Dichloroethene		50.04	1.0	50	0	100	75 - 125	51.2	2.3	20
trans-1,3-Dichloropropene		45.12	1.0	50	0	90.2	76 - 125	45.62	1.09	20
Trichloroethene		46.75	1.0	50	0	93.5	71 - 125	48.44	3.54	20
Trichlorofluoromethane		55.17	1.0	50	0	110	67 - 132	53.86	2.4	20
Vinyl chloride		51.29	1.0	50	0	103	70 - 135	50	2.54	20
Xylenes, Total		164.3	3.0	150	0	110	80 - 124	163.7	0.393	20
Surr: 1,2-Dichloroethane-d4		48.77	1.0	50	0	97.5	71 - 125	48.42	0.734	20
Surr: 4-Bromofluorobenzene		53.44	1.0	50	0	107	70 - 125	53.85	0.752	20
Surr: Dibromofluoromethane		48.69	1.0	50	0	97.4	74 - 125	47.94	1.56	20
Surr: Toluene-d8		53.77	1.0	50	0	108	75 - 125	55.19	2.62	20

The following samples were analyzed in this batch: HS15100056-03

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** ALS  
**Project:** San Jacinto River Coalition (b) (6)  
**WorkOrder:** HS15100056

**QUALIFIERS,  
ACRONYMS, UNITS**

<b>Qualifier</b>	<b>Description</b>
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
M	Manually integrated, see raw data for justification
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL/SDL

<b>Acronym</b>	<b>Description</b>
DCS	Detectability Check Study
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitaion Limit
SD	Serial Dilution
SDL	Sample Detection Limit
TRRP	Texas Risk Reduction Program

**CERTIFICATIONS,ACCREDITATIONS & LICENSES**

Agency	Number	Expire Date
Arkansas	15-024-0	27-Mar-2016
California	2919	31-Jul-2016
Dept of Defense	L2231 Rev 3-20-2014	22-Dec-2015
Illinois	003622	09-May-2016
Kansas	E-10352 2014-2015	30-Nov-2015
Kentucky	KY 2015-2016	30-Apr-2016
Louisiana	03087 2015/2016	30-Jun-2016
North Carolina	624 - 2015	31-Dec-2015
North Dakota	R-193 2015-2016	30-Apr-2016
Oklahoma	2015-047	31-Aug-2016
Texas	T104704231-15-15	30-Apr-2016

**Client:** ALS  
**Project:** San Jacinto River Coalition (b) (6)  
**Work Order:** HS15100056

**SAMPLE TRACKING**

Lab Samp ID	Client Sample ID	Action	Date	Person	New Location
HS15100056-01	SJRC (b) (6) #3H	Login	10/1/2015 3:51:09 PM	PMG	11B
HS15100056-02	SJRC (b) (6) #4H	Login	10/1/2015 3:51:09 PM	PMG	11B
HS15100056-03	SJRC (b) (6) #5H	Login	10/1/2015 3:51:09 PM	PMG	VW-3
HS15100056-02	SJRC (b) (6) #4H	Out	10/2/2015 8:31:21 AM	AAP	METPREP
HS15100056-02	SJRC (b) (6) #4H	Out	10/2/2015 11:14:43 AM	OFO	METPREP
HS15100056-02	SJRC (b) (6) #4H	Return	10/2/2015 12:03:25 PM	OFO	11B
HS15100056-02	SJRC (b) (6) #4H	Return	10/2/2015 4:20:54 PM	AAP	11B

**Sample Receipt Checklist**

Client Name: ALS-Hou High Res Date/Time Received: 30-Sep-2015 15:10  
 Work Order: HS15100056 Received by: PMG

Checklist completed by:	<u>Paresh M. Giga</u> eSignature	1-Oct-2015 Date	Reviewed by:	<u>Erica Padilla</u> eSignature	5-Oct-2015 Date
-------------------------	-------------------------------------	--------------------	--------------	------------------------------------	--------------------

Matrices: Water Carrier name: Client

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
TX1005 solids received in hermetically sealed vials?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

Temperature(s)/Thermometer(s):

1.0c/0.9c U/C |IR1

Cooler(s)/Kit(s):

Blue

Date/Time sample(s) sent to storage:

10/1/15 16:15

Water - VOA vials have zero headspace?

Yes  No  No VOA vials submitted

Water - pH acceptable upon receipt?

Yes  No  N/A

pH adjusted?

Yes  No  N/A

pH adjusted by:

Login Notes:

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

0

Regarding:

Comments:

Corrective Action:



## Environmental

HS15100056

ALS

San Jacinto River Coalition HANS

## **Chain of Custody Form**

Page \_\_\_\_\_ of \_\_\_\_\_



Customer Information				Project Information				Parameter/Method Request for Analysis											
Purchase Order:		Project Name:	San Jacinto River Coalition (b) (6)	A	SVOCs 8270														
Work Order:		Project Number:		B	VOCs 8260														
Company Name:	ALS Houston Dioxins	Address:	ALS Houston Dioxins	C	Metals + Mercury (Ba, Cd, Cr, Bo, Cu,Pb, Mn, Ni, Zn) 6020														
Send Report To:	Arthi Kodur	Invoice Attn:	Arthi Kodur	D	BTEX 8260														
Address:	10450 Stancliff Road Suite 210	Address:	10450 Stancliff Road Suite 210	E															
City/State/Zip:	Houston, Texas 77099	City/State/Zip:	Houston, Texas 77099	F															
Phone:	281-575-2279	Phone:	281-575-2279	G															
Fax:		Fax:		H															
e-Mail Address:	arthi.kodur@alsglobal.com	e-Mail Address:		I															
No.	Sample Description (b) (6)	Date:	Time:	Matrix:	Pres:	# Bottles:	A	B	C	D	E	F	G	H	I	J	Hold		
1	SJRC #3H	9-29-15	1:00 pm	Water		2	✓												
2	SJRC #4H	9-29-15	1:00 pm	Water		1			✓										
3	SJRC #5H	9-29-15	1:00 PM	Water		3		✓											
4																			
5																			
6																			
7																			
8																			
9																			
10																			
Sampler(s): Please Print & Sign: Jacquelyn Young				Shipment Method:			Required Turnaround Time:						Results Due Date:						
							<input checked="" type="checkbox"/> STD 10 Wk Days <input type="checkbox"/> 5 Wk Days <input type="checkbox"/> 2 Wk Days <input type="checkbox"/> 24 Hour												
Relinquished by: Jacquelyn Young		Date: 9-29-15	Time: 14:30	Received by:			Notes:												
Relinquished by:		Date:	Time:	Received by (Laboratory): abal 15 1431			Cooler Temp.		QC Package: (Check Box Below)										
Logged by (Laboratory): T Brown		Date: 9/30/15	Time: 1510	Checked by (Laboratory): 9-30-15 15:10			H-67		<input type="checkbox"/> Level II: Standard QC					<input type="checkbox"/> TRRP-Checklist					
									<input type="checkbox"/> Level III: Std QC + Raw Data					<input type="checkbox"/> TRRP Level IV					
									<input type="checkbox"/> Level IV: SW846 CLP-Like										

Page 37 of 37